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OBSERVATIONS ON THE EMPLOYMENT OF CROTON OIL AS AN EXTERNAL IRRITANT.

By R. HUTCHINSON, *M.D., Physician to the General Hospital, Nottingham.*

THE croton oil has been frequently recommended as an external irritant, but as yet little used in this country. The true power and successful application of this medicine, are not yet sufficiently substantiated, requiring a numerous collection of facts to ascertain in which cases, and under what circumstances, it may be most advantageously applied. I am anxious to contribute my quota towards arriving at a satisfactory conclusion, having for a long period been in the habitude of extensively employing it; and in publishing the following observations and cases, I hope that some of the readers of THE LANCET will assist in determining the real utility of a medicine so active and energetic. The combined experience of many can alone substantiate the true powers of a remedy which is as yet almost untried as an external irritant.

Six drops of croton oil, when applied to a sound skin, and rubbed in for a period of from eight to twelve minutes, speedily produces a rubescence, to a greater or less extent, depending upon the individual's susceptibility; this gradually increases, until a general, though moderate, tumefaction occurs, apparently affecting parts deeper seated than I have seen occur from the use of any other external irritant. This is succeeded, in a period varying from six to twelve hours, by numerous vesicles, some distinct, others confluent, differing in size and shape; at first containing a merely limpid serum, afterwards a distinct and consistent pus, and terminating in slight scabs. The redness produced is not of a vivid, but of a dull brick-dust hue. These circumstances, though regular in their course, vary much in intensity, according to the parts upon which the oil is applied; thus, on the abdomen, I have never been able to excite so active a rubescence as in other parts of the body. Over the muscular regions of the arms and legs, the effect is not so violent as where the bones are more superficially situated. The most powerful effects are produced upon the face, scalp, larynx, and chest, according to the observations I have made, in the order now enumerated. When the croton oil is applied to the face and scalp, it is frequently succeeded by erysipelas, but I have never seen any destructive or suppurative process established, wherever applied, nor erysipelas follow its use upon any part of the neck, abdomen, or extremities. In general, its effects are certain when applied to any part of the body, with the exception of over the abdominal muscles; at least I have never seen it fail of producing the sequelæ described, when applied upon any other part of the body.

At the hospital of La Pitié in Paris, the external application of the croton oil is said to have been successfully employed in cases of inflammation of the larynx. No practitioner could place confidence in it alone in active laryngeal inflammation; and my experience does not confirm the testimony in its favour when the inflammation is of a chronic nature; but the effect of any remedy must vary most considerably when employed under circumstances so different as upon patients placed in a crowded Parisian hospital, previously ill-nourished and debilitated, and upon those in a healthy and actively employed English country town. I have tried it perseveringly upon four cases of chronic laryngitis. The following may be given as a fair specimen of the whole:—

CASE 1.—*Chronic Laryngitis.*

Ann Cooling, ætat. 26, a strong healthy young woman, was admitted into the General Hospital, Nottingham, Oct. 16, 1832. For ten months she had partially lost her voice, varying from complete to a lesser degree of aphonia; the general health good; catamenia regular. She speaks now

in a whisper; has no power of elevating the voice beyond that; has slight pains on pressure upon the thyroid cartilage, accompanied with a sensible crepitating noise when pressed backwards, and moved from side to side. I have always seen this symptom present in every case of chronic laryngitis, but am not aware of its being mentioned by medical writers. Before coming into the hospital, she had been purged, blistered over the larynx, and had an irritation kept up by the tartar-emetic plaster.—20th October. Ordered three drops of croton oil to be rubbed over the laryngeal region, with medicine to regulate the state of the bowels.—22nd. Eruption has been extensive, and gone through its regular course; voice improved. From this period to the 8th of November the croton oil was applied four times; on this latter day the voice is but slightly improved from what it was on the day of admission; and six leeches were ordered to be applied twice a week over the larynx. These were continued to the 1st of January, 1833, when she was discharged from the hospital, her voice perfectly natural, and the crepitation upon pressure entirely removed.

In this case it was satisfactory to observe a sensible increase of voice upon every application of the croton oil, and its improvement during the continuance of the eruptions; but upon the cessation of irritation, the voice became again as imperfect as at first, showing that the croton oil had the power of relieving, though not of curing, this patient. The same result was observed in the other three cases.

CASE II.—*Neuralgia.*

Miss Brown, Basford, ætat. 20, of a good constitution, healthy and strong-looking, has suffered for the last three years from a most obstinate neuralgia of the supra-orbitary nerves. All medicines have been tried, but not perseveringly, without relief. On the 2nd of March, 1833, four drops of croton oil were rubbed over the right supra-orbitary region. On the 3rd, much swelling and inflammation had occurred, extending over the forehead, but not upon the scalp; the vesicles here were exceedingly numerous; the swelling and inflammation soon subsided, on the application of the liq. plumb. subacet. dil.—5th. The neuralgic pain is relieved; two drops of croton oil to be applied to the left side.—7th. The inflammation and swelling not so extensive as it has been on the right side; eruption gone through its usual course. The neuralgic pains continued less violent for a few days, but by the 20th became as bad as ever,—since which period to the present time she has taken regularly two drachms of carbonate of iron three times a day; and the dreadful sufferings of this patient are now entirely relieved. She is continuing the iron, fearful of relapse.

In this case the croton oil is observed to have been ineffectual in removing the neuralgia, though for a short period it much relieved it.

CASE 3.—*Paralysis of the Face.*

Oct. 1. Mr. James, ætat. 25, portrait painter, has had, for the last five months, complete paralysis of the left side of the face, that side of the mouth drawn down, the eyelids always open, sensation perfect; no pain, no swelling, or tenderness, over or in the parotid gland; health good; bowels regular; pulse natural; has been bled, purged, and blistered, without relief. Ordered to keep the bowels open, and rub for ten minutes three drops of croton oil over the parotid region.—2nd. Eruption extensive, tumefaction slight.—4th. Can partially close the eye; has some power over the other muscles of the face.—6th. The same as last report; repeat the applications.—8th. Can completely close the eye; mouth straight; appears nearly well.—12th. Quite well; can use the muscles of both sides of the face equally; has continued well to the present period.

This is a most satisfactory case, apparently yielding speedily to the employment of the croton oil, when other remedies had failed.

CASE 4.—*Loss of Power in the Arm.*

John Williamson, æt. 21, stockinger, Bulwell, Oct. 16, 1832, got drunk three weeks ago, and lay for many hours asleep upon the wet ground, with his arm, he supposes, doubled under him, since which period he has had complete loss of sensation and motion of the hand and wrist, without pains; his health is good; no headach; bowels and pulse regular. Ordered a purge, and to rub four drops of croton oil for ten minutes along the fore-arm, over the course of the radial and ulnar nerves.—18th. Slight improvement. Cont. ol. crot.—25th. The same as on the 16th; having neglected the application, four drops of the oil to be applied.

Nov. 1. Much improvement; can just raise the hand to a line with the wrist.—8th. Has applied mustard to the arm; is desired to use only the remedy prescribed.—15th. Improving. Cont. ol. crot.—22nd. So much better, can move the fingers and hand, though not perfectly.—29th. Has almost perfect use of the wrist-joint and fingers.

Dec. 6. Perfect power; quite well.

In this case it was most satisfactory to

observe the improvement, varying with the existence of the external irritation. Whenever the application was neglected, the hand partially relapsed into its former immobility, and by its continuance a perfect cure was effected.

The circumstances of these few cases will, I hope, induce other practitioners to confirm or refute their results—to establish if the successful cases were so fortuitously, or if, as I believe to be the fact, the croton oil is a remedy more certain in its effects than any other yet employed, and that it produces a stimulating and irritating action upon parts more deeply seated than is effected by blistering, tartar emetic, or any other yet known external irritant.

Nottingham, March 5, 1833.

ON THE

CIRCULATION OF THE BLOOD IN INSECTS.

By JAMES BOWERBANK, Esq., F.G. & Z.S.*

THE larva of the *Ephemera marginata*† is the insect which best exhibits the general circulation of the blood, and is the one which has been the principal subject of the following observations. It is figured and described in Dr. Goring and Mr. Pritchard's "Microscopic Illusions;" but, for my first introduction to the living larva, I am indebted to my friend Mr. Tulley, with one of whose splendid instruments my observations have been made. These larvæ may be found in considerable numbers in small pools of water in boggy or marshy places; mine were procured from similar situations on Hampstead Heath. They may be preserved for many months in glass jars or other vessels, with a little duck-weed floating upon the surface of the water. In selecting them for the purpose of exhibiting the circulation of the blood, care should be taken to choose such as have not yet attained a greater length of body than about one-eighth of an inch,‡ as the whole insect may then be subjected to examination, with a reasonable expectation of seeing the full extent of the great dorsal vessel; particularly if one be selected which has the intestinal canal free, or nearly free, from food, as the success of the observation will greatly depend upon this circumstance. In fixing the larva for observation, which of course must be in water, great care must be taken not to compress the body, as, although the central circulation may be seen proceeding with considerable vigour, that through the lateral vessels, and those of the tail, legs, and antennæ, will either be much impeded or entirely stopped. Having fixed the insect, with the above precautions, and with its back towards you, a truly beautiful and astonishing sight presents itself. The blood, abounding in flattened oat-shaped particles, will be seen circulating in every part of the body, not in a continuous stream, but at regular periods, agreeing in its motion with the pulsations of the great dorsal vessel. This vessel extends nearly the whole length of the body, and is of great comparative magnitude. It is furnished, at regular intervals, with double valves, about equal in number to the sections of the body. Both above and below each of these sets of valves is a pair of singular-looking appendages. They are, probably, nervous ganglions, auxiliary to the motions of the vessel, but so exceedingly pellucid as scarcely to be defined with the highest power which can be applied to them. The action of the valves is a most interesting and beautiful sight. While in their greatest state of collapse, the point of the lower valve is seen closely compressed within the upper one. At the commencement of the expansion of the artery, the blood is seen flowing in from the lateral apertures; and, at the same time, the stream in the artery commences its ascent. When it has nearly attained its greatest state of expansion, the sides of the lower valve are forced upwards by the increased flow of the blood from the section below the valve, the lateral openings are closed, and the main current of the blood is projected through the two valves.

It is not easy to see this beautiful structure of the valves of the great dorsal vessel, for it is only when the insect is in a state of great exhaustion, or has been just so much compressed as to destroy voluntary motion without entirely depriving it of life, that it is possible to subject it to a power sufficiently high to discern these extremely delicate and transparent tissues; and even then, to see them to the greatest advantage, recourse should be had only to such as are in the last three or four sections of the body.

The structure of the upper valve appears to be a reflecting inwards and upwards of the inner coat or coats of the artery; and of the under one, to be a contraction and

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* From the "Entomological Magazine," No. III.—a new scientific journal, the pages of which contain some very excellent contributions.—ED. L.

† It does not appear quite certain of what particular species of ephemera the insect described here is the larva.—ED.

‡ The microscope employed, elongated the insect to the eye, ten inches.—ED. L.

projection of the like parts of a portion of the artery beneath, so as to come within the grasp of the lower part of the valve above it. The exterior portion of the artery may be seen as an exceedingly fine line, connecting the parts above and below the valves.

The blood does not appear to be confined within any specific vessels, previously to its entering the lateral openings before-mentioned, as, when they open, the particles are seen converging towards them.

The whole of the blood received throughout the course of this vessel, is conveyed to the extremity of the anterior part of the body, where the vessel makes a curve inwardly, and is lost to view just beneath the animal's head. To all appearance, the main current of the blood is now discharged into the cavity of the body, as it is seen pursuing its course downwards, in a wide-spreading stream, on each side and beneath the great dorsal vessel. As it descends, portions are again absorbed by the valves of the dorsal vessel, and, at the same time, vessels passing down each side of the body convey another portion of the blood to its lower extremity. These are decidedly vessels, not portions of the great abdominal cavity, their boundaries being clearly definable. They communicate at each junction of the sections of the body with the great abdominal cavity, as a part of the blood they convey is discharged at these points, to supply the place of that absorbed by the valves of the great dorsal vessel. These vessels terminate by discharging their contents into the lower end of the great dorsal vessel.

The circulation is also strikingly and beautifully exhibited in the tail. Here the ascending and descending vessels, like vein and artery, accompany each other; and, at the same instant that the blood is seen to pass up the one, with the usual pulsatory motion, it descends in the other in a similar manner. This is the more apparent, as the sides of the vessels are well defined, and each perfectly distinct from the other.

Although the blood passes with the same pulsatory motion through these minute vessels as it does in other parts of the body, yet no pulsation of either the ascending or descending vessels themselves can be detected. The motion, therefore, seems to be entirely dependent on the action of the great dorsal vessel, which evidently performs in the insect the same functions that the heart does in vertebrated animals.

Supplying and returning vessels may also be seen in the legs, although they cannot be so clearly defined as in the tail; and in the antennæ they pass up on the one side of the first joint, and, turning round at the extremity, they again descend into the head.

Upon fixing the insect so as to obtain a side view, the great dorsal vessel presents a very interesting appearance. It is seen continually and regularly oscillating backwards and forwards, upwards and downwards, and at the same time the main current of the blood in the great abdominal cavity winds its way in all directions towards the hinder extremity of the insect. Scarcely any larvæ exhibit the circulation of the blood in so beautiful a manner as the one described, although there are few in which it is not more or less to be seen, as I have been able to detect the great dorsal vessel in almost all I have examined. In one, figured in the work before quoted, of Dr. Goring and Mr. Pritchard, and said to be the larvæ of a culex, no particles are visible in the blood; but the great dorsal vessel, its valves, and their singular appendages, are distinctly and beautifully apparent.

Next to the larvæ of the ephemera marginata, the larvæ of agrion afford the best view of the blood and its circulation. In all the species of these larvæ I have yet examined, I have found it as nearly similar as possible in appearance to that which we observe in the ephemera, and in some instances it has afforded even more satisfactory results. The head of this larva is much more transparent than that of the larva of the ephemera; we therefore had a better view of the circulation of the blood in the head of this insect than can possibly be obtained in the other. In this object the blood is seen rushing like a beautiful intermittent fountain towards the mouth, and dividing, right and left, into two jets, a portion of each of which flows within a given boundary past the back of the eye, whilst the remainder winds its way through other channels, deep in the side of the head, and returns again into the body.

The antennæ of this insect also afford another beautiful instance of the circulation being carried forward within well-defined vessels. They are each composed of six joints, up four of which the blood is seen to take its course, and turning round the extremity of the fourth joint, it returns by a distinct vessel into the head.

In the leg, likewise, the circulating fluid and its vessels are clearly and distinctly to be traced, even to the very extremity of the tarsus, where, as in the antennæ, the particles of the blood are seen to descend on the one side of the leg, and, turning the extreme point, to return up the

contrary side to the one by which they came down.

I regret much that I have not yet had an opportunity of examining the ephemera in its perfect state; but in two species of culex, one of which was first observed and brought to me by my friend Mr. Tulley, I have seen the great dorsal vessel performing its functions in a manner similar in every respect to its appearance in the larvæ of ephemera, agrion, &c. &c.; but, from the body of the fly being more opaque than that of the larvæ, and nearly covered with its striated scales, neither the valves nor the particles of the blood could be detected. On another occasion, after having carefully cleared the wings of phlogophora meticulosa of their coloured scales, both Mr. Samouelle and myself clearly saw a fluid pass down the side of one of the principal ribs of the wing. We may therefore, I think, fairly conclude, that the circulation is carried forward in the perfect insect as well as in the larva, although, perhaps, not with so much vigour as when young and growing.

In describing what I have seen, I have abstained from using the word vessel, except where the margins were distinctly to be defined, although I am inclined, from what I have seen, to be of opinion, that a much greater portion of the circulation than we can clearly define is carried on within given vessels, as the blood may frequently be seen flowing in curved and other lines, and confined within very narrow limits, but so deeply seated amidst the muscles and intestines as totally to prevent the boundaries of the current from being clearly observed. This is strikingly the case in the side view of this insect, where currents are seen winding about in many different directions, but from the intervening muscles and intestines their boundaries are not visible; nor can it be expected under such circumstances, when we consider that the blood is a perfectly colourless and transparent fluid, visible only from its containing a number of particles of a somewhat flattened oat-shape, and that the great dorsal vessel itself is only to be seen distinctly with a very high power, and even then can only be defined with certainty whilst it is in motion.

I cannot omit observing a singular coincidence between the flattened oat-shaped particles of the blood in the insect, and of the circular double concave plates in the human blood, which is, that the particles of the former, like those of the latter, assume a globular form immediately on coming in contact with water.

EXPERIMENTS MADE TO ASCERTAIN THE QUANTITY OF FREE CARBON IN BLOOD.

By W. Reid Clanny, *M.D., Sunderland.*

Reflecting, since the publication of my papers (inserted in The Lancet for the 3rd of Nov. 1832, and 13th of April last), upon the venal and arterial blood, it struck me, that in order to leave no room for cavil, a series of experiments might be devised and performed, for the purpose of ascertaining the nature of the gas which was formed when free carbon was removed from the blood in the experiments detailed in the above-mentioned papers. Having made my arrangements, I shall now as briefly and as clearly as I can, detail a case and the experiments.

On the 2nd of this month (May), William Simpson, who has been for some time engaged as a labourer in a quarry, applied for my advice at our infirmary in the absence of one of my colleagues. He states that about two months ago an abscess formed in the right ear, which, having burst, still continues to discharge a purulent fluid. This affection of the ear has, up to this moment, been accompanied by severe headach in the day time, and, during the last fortnight, he has experienced giddiness and stupor. His bowels are regular; pulse is 78, firm, and full; his countenance is florid, and his temperament truly sanguineous. Two ounces of blood were received in a cupped flask, *in vacuo*, and secured. A similar quantity was also received in another flask, and in the same manner. Sixteen ounces which were received in a tin vessel, to the eye appeared healthy, except about in one part, which was of the size of a shilling—a fibrine which appeared to be thrown up upon the centre of the crassamentum. I removed the free carbonic acid gas from the blood in one of these flasks, in the manner explained in the pages of The Lancet for 3rd of November last, and admitted atmospheric air into the flask. When the vacuum over the blood was occupied by air, I turned the stop-cock, weighed the flask with its contents, and noted it accordingly. I now agitated the blood and air for some time very freely together. This being done, I attached to the top of the flask the tube for drawing carbonic acid gas through a flask of lime water, by the agency of the air-pump in an exhausted receiver, as invented by Vogel, a method which I have very frequently and successfully practised in cases of typhus

fever, spasmodic cholera, and other acute diseases. I found that carbonic acid was formed by this agitation, which showed itself by its direct union with the lime contained in the flask of lime water. I repeated this process several times, using each time fresh portions of atmospheric air and lime water, and when the venal blood became sufficiently florid, I found that no more carbonic acid could be extricated; that the lime water continued transparent, and not a particle of the carbonate of lime floated in the lime water. This experiment being finished, I admitted the atmospheric air freely, and weighed the flask, with its contents, when I found that exactly thirty-one grains and a half were removed by this process from the two ounces of blood, which must be considered as free carbon.

In order to corroborate these experiments, I will now relate the method I adopted with the two ounces of blood, received also *in vacuo*, screwed firmly down, and standing in tepid water during the time I was occupied in performing the experiments detailed above.

I extricated by the air-pump the gas which this blood contained as it circulated in the veins, admitted atmospheric air, freely turned the stop-cock, and weighed the flask, with its contents, noting the weight, as formerly mentioned. I now agitated the blood and atmospheric air together very diligently. The next step was to exhaust the atmospheric air from another capped and graduated flask. This being done, I connected, most accurately, these two flasks, opened a communication between them, and agitated the blood freely and diligently for some time; I now secured the stop-cocks, detached the flasks, transferred the gas, which was received into the vacuum flask containing the blood, to a graduated pneumatic jar in the p. trough, with a small stop-cock and tube perforated by a small needle for transferring gasses to the eudiometrical tube for experiment.

There still being rarefied air in the flask containing the blood, I opened the stop-cock, when atmospheric air rushed into the flask. I again attached an exhausted flask, as explained above, formed a communication, and agitated the blood and atmospheric air, which was in part received into the vacuum flask, and the experiments were followed up as just narrated.

I continued this plan for some time till the blood became very florid, and found that these two ounces of blood lost exactly 31¼ grains by these experiments, and that the jar upon the pneumatic shelf contained a large quantity of carbonic acid gas.

These experiments prove that free carbon is removed, not only by these processes, but also by the process of respiration, and corroborate my experiments upon the arterial blood of L. Bonner and M. Thompson, as recorded in THE LANCET for the 13th of last month. When I experiment with the air-pump, the aperture in the plate is never diminished by having the open button screwed into that aperture, and such is the power of this instrument when worked briskly, that the whole of the gasses are removed from fluids placed in the exhausted receiver, not only accurately but also rapidly.

Sunderland, May 8th, 1833.

ARTIFICIAL ANUS

FOLLOWING THE OPERATION FOR

STRANGULATED FEMORAL HERNIA.

To the Editor of THE LANCET.

SIR,—The following case of artificial anus following the operation for strangulated femoral hernia, occurred in my practice lately, and as there are some points of importance connected with its history, its relation may not be unacceptable to many of your readers. It shows, in a peculiar manner, that an artificial anus, although in the first instance, the preservative of life, may, in time, become the cause of a disagreeable existence and a painful death. The circumstances are these:—

Mrs. R., ætat. 45, was on Thursday morning, March 28th, attacked with symptoms of intestinal strangulation. I saw her for the first time on the Saturday morning following; there was then every symptom of a well-marked case of strangulation, with a small tumour in the right groin, lying in the parallel of Poupart's ligament, exceedingly painful at either extremity, and elastic in the centre; the belly was tympanitic, and very tender in the vicinity of the tumour; pulse 130, and contracted. Serious attempts were now made at the taxis, by the different means, until the afternoon, when she consented to have the operation performed. Accordingly I proceeded to the task, assisted by my friend Mr. Davison, a respectable surgeon at Seg Hill. The sac was carefully exposed and opened, and Gimbernat's ligament was freely divided. However, the intestine could not be reduced. The superior border of the falciform process of the fascia lata was now divided in a direction upwards and inwards. The gut immediately receded,

and the symptoms of strangulation were relieved. The wound was dressed, and our patient placed in bed. The rupture consisted of a small knuckle of ilium, which looked very suspicous, but which soon declared its mortified state by a discharge of fæces from the wound, which now continued to find an exit therefrom, with a sour smell, until the seventh day, when she had a motion by the natural passage again. The fæces, however, after this issued through the wound, which course they continued to take during the future period of her short existence. She gradually grew thinner, and lost her appetite. The fæces kept up an irritation of the wound, which was now so exceedingly sensitive as to preclude the possibility of cleaning it properly. Active inflammation then set in, which spread down her thigh, and up over the fore-part of the abdomen, attacking all the contiguous structure. Nothing appeared to have the power of stopping its ravages, for the fæcal matter continued to be poured out over the inflamed surfaces, thereby adding to the evil. Sloughing followed, and for about two inches below Poupart's ligament the femoral artery was laid bare. In short, I may state, that she kept gradually sinking, having survived the operation thirty-two days.

It is to be regretted, that no *sectio cadaveris* was allowed. Here is a case in which inflammation and mortification succeeding to an artificial anus, proved destructive to life. I am inclined to attribute the origin of the inflammatory symptoms entirely to the irritating nature of the discharges. I am confident that tents, as recommended by Sebatier and Dessault, are of little use. Their employment here was followed by cramps in the stomach, and afterwards by an immense discharge of fæces, thrusting the tents before them. Nor am I inclined to agree with Dr. Reisinger, who recommends time to be allowed for the irritability and sensibility of the gut and septum being allayed; on the contrary, from the result of this case, I should be much inclined hereafter to put M. Dupuytren's practice in force as soon as it can be attempted, and much disposed to doubt the propriety of waiting to see whether nature will or not effect a cure. Still less should I think of trying to allay the irritability of the wound, while such an offending cause remained; for I am satisfied that the few days previous to the commencement of the inflammatory symptoms, might have been better spent in attempting a radical cure. However, the fact of such an untoward event being apt to occur, will suggest to the practical surgeon, that the sooner the artificial anus is cured the better. I am, Sir, your most obedient humble servant,

F. W. Grant Calder.

Newcastle-on-Tyne, May 4, 1833.

ABSCESS AND ENLARGEMENT OF THE TONGUE, CURED BY SETON.

To the Editor of The Lancet.

Sir,—The situation of the disease in the following case, rather than any other circumstance connected therewith, renders it singular. If you think it worthy a place in your valuable journal, you will oblige me by inserting it. I have the honour to be, Sir, your obedient servant,

William Thompson, M. D.,
Assist.-Surg. Co. Antrim Infirmary, Ireland.

Lisburn, 30th April, 1833.

A. J., a delicate-looking boy, ætat. one year and seven months, was admitted into the County of Antrim Infirmary, on the 6th of April, 1832, on account of a large abscess in the substance of the tongue.

The disease had been of some months standing, and an opening had been twice made, prior to his admission, in the under surface of the tongue on the right side, which gave exit to a considerable quantity of thin fœtid pus. The reduction in size of the tongue which took place in consequence, nearly allowed of its being replaced in the mouth, from which it had previously protruded to a great extent. On the closure of the opening, which took place a few days after it had been made, the cavity of the abscess became rapidly distended to a greater degree than at first.

The child's appearance on admission into the infirmary was frightful; the tongue, enormously enlarged, and protruding from the mouth, was nearly in a state of complete strangulation from the pressure of the teeth; its surface was dry, covered with a brown fur, and intersected here and there with fissures; the nostrils were widely distended, respiration being entirely performed through the nose. Food, in a liquid state, could, with difficulty, be administered, by drawing back the angle of the mouth; the child was, in consequence, very much emaciated.

I immediately made a puncture in the situation of the original opening; a considerable quantity of matter followed,

which gave relief, by diminishing the volume of the tongue. Two days afterwards the *argent. nit.* was introduced into the opening, which was beginning to close. This, however, had not the desired effect, the matter collected rapidly, and the tongue again protruded. In order to prevent a fresh accumulation of matter, and at the same time to excite inflammation in the cavity of the abscess, I passed a seton through it, by means of a probe which I introduced at the original opening, and caused to project at the opposite side of the tongue. An incision was then made on it, and the seton drawn through. The ends of the cord were then united to prevent its slipping out.

April 11th. (The seton was introduced on the 9th.) The tongue is now so much reduced in size as to admit of its being retained with ease in the mouth; the quantity of matter cannot be ascertained, as it passes off as it is secreted. A fresh cord was introduced.

April 30th. The tongue being now reduced to its natural state, with scarcely any discharge of matter from the openings, the seton was removed. The child continued to improve in health and strength from this time forward, and was discharged on the 22nd of May cured.

It is now nearly twelve months since the child was discharged, and it still remains free from any return of the disease.

REMARKS ON THE

EXTRACTION OF TEETH.

To the Editor of THE LANCET.

SIR,—Having lately seen in your valuable work, THE LANCET, some observations by Mr. Delafons on the extraction of teeth and on the instruments commonly employed in that operation, I beg leave, as a professional man, whose study and occupation dental surgery has been for many years, to offer a few observations on the same subjects, accompanied by some remarks on what I conceive to be some inaccuracies which have crept into his statements. In doing this, I beg to disclaim everything like hostile feeling towards Mr. Delafons, who, in common with every scientific man who makes known the results of his experience for the benefit of the public, deserves both thanks and commendation.

Mr. Delafons alluded in his paper to the numerous instances which exist of unscientific men who attempt to practise as dentists. Allow me to add a case in illustration of the existing state of this branch of the profession, the truth of which I can attest. Sir D. H. B., lately passing in his curricle along the New Road, much plagued with an aching tooth, stopped at the door of a newly and neatly-fitted-up house, in the window of which the words "Teeth Extracted," were emblazoned in golden letters. On entering the house, he announced that *he* wanted a "tooth extracted." The person whom he addressed, and who announced himself as the master of the shop, stammered out, "Yes, Sir, yes, Sir;" adding, "that he could, he dared to say, take it out." "Then do so," said the baronet, "for I am in great pain;" and sat down in a chair. The "dentist," after some fidgeting and shuffling about the room, took a survey of the decayed tooth, but it was not until he had been frequently spurred on by the importunities of his patient with "Come, come, for God's sake, make haste and ease me," that he commenced the apparently important operation. Happily he finished it, but then, instead of attending to his patient, he began to jump about the shop like one overjoyed at some fortunate event. The astonished baronet, however, soon called the man to order, and elucidated the cause of this extravagance of delight, by obtaining from this "dentist" the honest declaration, that he had only opened shop *that very day*, and that this was the first tooth he had ever drawn. The man had lately cut his occupation in the tray-and-napkin line, as gentleman's footman, and turned "dentist."

I can subscribe most heartily to the truth of Mr. Delafons' assertion, that tooth instruments are made by persons, who, having no practical experience of their application, are constantly liable to design defective instruments. I paid two pounds for one, expressly arranged for perpendicular extraction, plausible in theory, but utterly useless in practice, for during four years practice with my other instruments, it has only proved instrumental to the extraction of two teeth.

That Mr. Delafons should have met on the continent with an instrument of the key kind, "which the dealer assured him was made *a l'Anglaise*," is not extraordinary, for that instrument is, by all foreigners, termed the "*clef Anglaise*," as it justly deserves to be, from its being the invention of an English surgeon, who, many years ago, for the better extraction of the molar teeth, induced his instrument-maker to apply a lever and wooden crucial handle to assist the action of the ancient parrot-beaked forceps, now almost grown into disuse. But a slight inspection of the short and stunted under claw, and the upper hooked one, will instantly

suggest the probable production of the present key instrument, on which so many subsequent improvements have been made. Whether the curve in the stem (as noticed by Mr. Delafons, and by which, I imagine, he means the lever) is above or below, appears to me to be a mere matter of fancy, or perhaps it is a copy of some particular instrument made for an express and particular tooth, I myself having in use two, a left and a right, with their levers bent into the form of an S, expressly applicable to the removal of the *dens sapientiæ* or third molars of the upper and lower jaws, the situation of which teeth being generally smaller, and, in some degree, shorter, than the molars before them, I had frequently found them difficult to seize with instruments of the ordinary kind. The action of tooth-drawing is Archimedean in the true acceptation of the words, "Give me another world to stand on, and I will produce a lever that shall move this one;" or, in plainer language, where the force of *two* is applied to *one*, the one—then the weaker—must either be moved or broken. And here I beg to observe, that it is ever in the *removal* of teeth that the science and experience of the operator are put to the test.

Every operator having due regard to the feelings of his patient and his own reputation, will be anxious to obviate the difficulties he may meet with, either by invention, or the selection of instruments best suited to his purpose; and the story related by Mr. Delafons of the young practitioner, who attempted to operate with an instrument having *two claws* on the same lever, though it may serve to relieve the dulness of a lecture, or appear amusing in print, must, ere it be received as fact, pay a large toll at the turnpike of probability. But when I state, that in *extraction* the science and talent of the operator are put to the test, I would observe also, that he is not, and cannot be, by any possible means acquainted with the exact position of the concealed *roots* of the tooth. And it is further to be considered, that the bony structures then about to be exposed to pressure, are only competent, by their formation, to afford a certain specific resistance. If tasked beyond that, defeat, through their fracture, must be the inevitable result. Nor does it afford the slightest alleviation to the sufferings of the patient, whether the operation be attempted *laterally* or by the more preposterous process of perpendicular extraction. Patience, gentleness, and judgment, are in the greatest degree requisite to the skilful accomplishment of the object. Although, too, as an operator, he knows (or should know), that a first molar tooth of the upper jaw has ordinarily three roots, two straight, on the outside, and a third in the inside, semilunar, and that those of the lower jaw have only two; though he may know this, and also, from previous observation, their usual position, yet it is impossible that he should know how the tooth under extraction may have its roots situated. The roots may very widely diverge in their sockets, or, closing on their extreme points, like the ancles of a bow-legged man, they may have shoots of alveolar portions passing from one side of the process to the other, retaining the tooth, like a bolt through a staple, with a slight and limited motion, to its position. In either of these cases, although the tooth may be made to incline *a little* by the power of the instrument, yet great patience, skill, and dexterity, will be required to remove it without fracture.

Of all the instruments I have seen,—from one said to have been in use in the reign of the Edwards and the Henries, down to the present time,—I find none so suitable for surmounting these difficulties as key instruments (of my own fashioning), capable of being converted in effect, to the alternate purposes of forceps and key, or key and forceps, at pleasure, even during the process of operation.

With regard to the bicuspides being announced "as single-rooted teeth," I have always held it extremely hazardous, either in conversation or in writing, decidedly to declare the number of roots allotted to the teeth of the human subject, liable as they are to such curious and astonishing varieties. I have found *dens sapientiæ* with four roots, *molars* with five, and the *bicuspides* most frequently with two. One very recently extracted by Mr. Sinclair, my partner, had three; and where they *are* single-rooted, they have generally the breadth of those which are double, possessing, as it were, germinated roots, merely being divided by a thin and transparent portion of bone, easily discoverable when held up to the light immediately after extraction, and terminating their two distinct bloodvessel courses in one fibrous filament at the extremity of the root. These teeth offer little difficulty in removal with the forceps, if the forceps be so arranged as to press in their bite only on the sound neck of the tooth. This they may easily be made to do, by thrusting their points a little under the gum; but if the "chops" are allowed to press on the sides of the decayed tooth, it will be crushed to pieces, and the stump will probably remain painfully immoveable, until descending or rising, in due course of time, from its socket, it may, if then painful, be easily expelled with the punch.

Mr. Delafons thinks that tooth-drawing is so frequent, that the public usually regard it as a matter beneath consideration. I am of a different opinion. A titled admiral, for instance, whose courage, when on duty, had ever been most daring, and who was as familiar with fire and death as a demon or fabled salamander, to whom I was sent by his aunt (and indeed by the whole of his family, who had for a fortnight been kept in a state of the utmost anxiety and disturbance through his sufferings), positively refused the proffered relief of extraction, saying, "I believe the world knows that I am no coward, but I strike to this, and would sooner lose a limb!" In another case, that of a surgeon in Brighton, since dead, I persuaded the patient, after repeated calls and examinations, to lose a first molar of the lower jaw, but the operation was not effected until he had swallowed as much brandy as made him ill for a week. Indeed, in the course of my practice, all on whom I have operated, from the highest personages in the state to the lowest menial, have experienced fear at the process.

With respect to the extraction of teeth completely perpendicular, I for one do not believe the thing possible, both from the form of their roots, and the myriads of membranous filaments connecting their periosteum with the internal lining of their sockets or alveoli, which may be seen by the microscope on recent extraction. When we say we do it as nearly perpendicular as possible, we say all that can with truth be said on the subject. I confess I have never yet seen "a jaw, showing the sockets of the teeth as it were, upon springs," except indeed in the case of an artificial set; nor have I ever found the bone to be "of a soft, spongy, yielding texture," even in cases of exfoliation. On the contrary, I have ever found the upper edges of these sockets unyielding and brittle, as bones usually are, and easily to be broken. I confess that until now I never heard it doubted that the teeth, jaws, and bones, were inelastic and unyielding. The effect of the pressure of a spring placed on a bicuspis of the under jaw, for the purpose of supporting an apparatus for supplying "the loss of a large portion of the palatal bones," as related by Mr. Delafons in support of his opinion of the elasticity of the teeth, seems wonderful, when we are told that, through pressure of the spring, "the tooth actually sunk beneath it, until it so completely disappeared, that not the least trace of it could be found!" The wonder on my part is—where it went to. If it sunk into the jaw, as Mr. Delafons would have us consider, believe me, if it could be found by no one else, it would have been found by the patient himself. It could not have sunk into the jaw (had the space been large enough to hide it from the sight) but through the socket which held it; and if it did that, it is fair to suppose that it must have produced (as in ordinary cases) inflammation, from membranous excitement, to the highest possible degree, when suppuration, succeeding excitement, would have again returned it to sight, as the volcanic fires of Vesuvius threw back the brass slipper of Empedocles! My version of this marvellous story (which was doubtless merely reported to its present narrator) would ascribe a much more simple cause for its disappearance. Loosened from its socket, through the pressure of the spring, I should say that it fell from its position into the mouth, and was swallowed during mastication or sleep. Equally absurd with "perpendicular extraction" is the mad scheme of curing aching teeth by "excision," a sort of operation by halves. Two cases have fallen under my notice, where decapitation of molars had been performed in London, and their radical remains were afterwards consigned to oblivion in Brighton.

The roots of the teeth, although conical for the most part, are not always so. They may be curved, crooked, or bulbed, with corresponding indentations in their sockets. In some instances of lower-jaw molars, where great divergement of roots, or intervening alveolar, has existed (only to be guessed at by the tooth yielding, yet not coming out), I have found it requisite, with a powerful pair of cutting pliars, to divide transversely the *crown* and *roots*, and then, by removing the roots with forceps, one at a time, have accomplished an operation which was previously rendered abortive. The works which I have offered to the public contain minute explanations on the subject, with engravings of the instruments which I employ.

With regard to hemorrhage from teeth extraction, although rare in occurrence, no one can consider himself exempt from such an accident, and we should ever be prepared with a remedy for it. That which I have found most effective, is, pressure on the lacerated vessel, which by that means soon closes, from the coagulation of its own stream. Lint, moistened with dilute sulphuric acid, or even bees wax made soft, and pressed on the vessel through the empty socket, I have ever found efficacious. With my best wishes and respects, I remain, Sir, yours, &c.

C. BENE,
Surgeon-Dentist to their Majesties, and the Royal Household.

Brighton, April 1833.

LONDON MEDICAL SOCIETY,

Monday, May 13th, 1833.

Mr. KINGDON, President.

THE INFLUENZA.

ALTHOUGH an impression seemed generally to exist, that the prevailing epidemic was on the decline, the time of the meeting was again wholly occupied by discussion on the subject. Dr. Whiting alone showed cause against that opinion, affirming that in his practice it had not abated, and quoting the numerous accounts published of its prevalence and extent throughout the country.

No new fact was elicited,—the debate taking what was, perhaps justly, considered by Dr. Shearman a theoretical turn, tending, however, to practical importance, if the positions advanced were based on solid grounds,—a query which we cannot satisfactorily answer. Neither can we advantageously give more than a skeleton of the proceedings,—inclining to show rather what points the debaters debated, than how they debated them,—a species of record which is often not without its interest, and occasionally more worthy of the public eye than a whole-length report. The reader can, in such cases, fill up the *hiatuses* with his own opinions. We are willing, with a few exceptions, that he should do so on the present occasion.

Dr. BURNE commenced by referring to a declaration made on a previous evening, that the influenza afforded no pathognomic signs by which it could be recognised,—averring, himself, that no disease could be more unerringly recognised by individual symptoms.

Dr. WHITING thought that this was not correct, and that an attack could be detected only be taking the symptoms in the mass.

Mr. PROCTOR took the opportunity of condemning the conduct of those medical journals which had led the public to believe that the influenza was an insignificant complaint, easily cured by saline medicines and blankets. He wished to state here, as the proceedings of the Society were made public, that these statements were very improper ones; and if the editors of those mischievous publications, the medical journals, were really medical men, they ought to make themselves better acquainted with facts before they thus attempted to deceive the public and the profession. He had himself lost one patient (by death) who had been led to think, from reading an extract from one of these journals, that his disease was a common catarrh, and had suffered the inflammation to get beyond the remedial means. The speaker left his hearers quite in the dark as to which periodical his remarks were directed against, but we are led to believe that his wrath was more particularly excited by that of Longman and Co.

Dr. RYAN did not know to what publication Mr. Proctor referred, but would repel the imputation as far as *his* journal was concerned, and contended for the propriety of medical journalists commenting on the disease, many cases of which were undoubtedly curable by very slight treatment.

Mr. CLIFTON spoke of advantage to be derived from the application of warm water to the forehead, to relieve the headach, and against free bleeding in the disease. The only two cases in which he had employed the latter, were the most difficult to cure of all which he had treated. He agreed with Dr. Burne as to the cognizance of the disease by particular symptoms, considering that the extraordinary degree of prostration, and the great amount of expectoration, were the most prominent, and such as were not common to any other disease.

Mr. WILLIAMS remembered the similar influenza of 1803, and said, that depletion was then regarded as an injurious plan of treatment.

Mr. PROCTOR.—Yes, but the Brunonian doctrines were then in full fling, and practitioners had not learned the full use of the lancet.

Dr. WHITING was led by these latter remarks to recur to the opinion he expressed on the last evening, that the inflammation in this disease was of a specific kind. He contended (if we mistake not—for his views appeared, through some degree of intricacy, to be difficult of apprehension on the part of many of his auditors, although expressed with the clearness which usually characterises his remarks in this society), that the fact of bleeding (employed as a *remedial* means) producing an injurious effect in this disease, went to show that the human frame was liable to more than one kind of inflammation,—here being one of a violent kind which venesection would not cure, while a large class was subservient to it. This view of many inflammations he had before advanced, and endeavoured to confirm by reference to other diseases, and he thought that an additional proof was now afforded of its truth. Dr. Whiting's opinions gave rise to a very long discussion.

Dr. SHEARMAN partly coincided with these views; he termed the disease a "catarrhal fever," in which the inflammation was "essential," and not of the same character as common inflammation.

Dr. NEGRI made some remarks on the mode of production of the disease. In Italy, where it was not unusual, they always alluded to it by an expression which implied that the atmosphere was the source of the attack,—that it was owing to the influence of a peculiar condition of the atmosphere. This he thought was right, averring that we ought not to speak of it as a specific disease, but as a disease produced by the atmosphere, evincing particular symptoms according to the part of the body on which the air had more directly acted. Thus, he had a patient under his care, who, when on horseback, always rode with his head leaning forwards and downwards, so that the back of his neck was exposed to the current of air through which he might be passing. As he was lately riding out, he suffered an attack of the epidemic, and came home complaining especially of great pain in the back of his neck, for which he wished leeches to be applied there. With this he (Dr. N.) did not comply, but administered sudorifics, produced free perspiration, and thus freed the patient at once from the catarrhal symptoms, the prostration, and the pain in his neck. The protæan characters of the disease might in this way be accounted for, each person evincing some symptom more prominent than the rest, according to the part most exposed to the poisonous influence of the air.

Mr. BLENKARNE remarked that the north-west winds had a great effect in producing the disease; but Mr. CLIFTON, who spoke as though he had been observing the changes of the vane during the last two months, considered, that it had prevailed during every wind through nearly the whole of that period, and that all diseases this spring had assumed a more virulent character than usual. Dr. BURNE thought that electrical variations in the atmosphere were closely connected with the epidemic, and intimated that electricity might ere long be discovered to exert an influence in the production of human disorders as yet quite unsuspected.

NEW STOMACH-EMPTIER.

The time of the meeting was thus brought to a close, when an additional ten minutes was devoted to the examination of an apparatus for emptying the stomach in cases of poisoning, invented by Mr. (or Dr.) Williams (a visitor on the present occasion), and intended as a rival or substitute for the common stomach-pump. It consisted of an enema pipe, attached to the extremity of a caoutchouc tube two feet long, at the other end of which was affixed a second pipe. At the base of the latter pipe was a small flat circular brass plate, ground fine, like the table of an air-pump, upon which a large cupping-glass was intended to be placed. When the tube is passed into the stomach, the interior of the glass is heated with spirit of wine. It is then placed on the plate, a partial vacuum is produced, and the liquid in the stomach passes up through the pipe covered by the glass, and flows over upon the brass plate. A wooden plate, with a greased groove for the edge of the glass, was shown, and seemed to be the handier of the two. The apparatus was simple enough, but would under no circumstances, probably, be adopted in preference to the air-pump; for although fluid may also be injected with it, the trouble of replacing the plate and pipe with an injecting bladder, would prove very vexatious to the practitioner who allowed himself to be thus hindered when a stomach-pump was at hand. Mr. Williams says, that "cupping-glasses are generally within reach when pumps are not." True; but air-tight plates and suitable pipes are usually absent. The exhibitor displayed his contrivance with great politeness, and was listened to with equal attention, but the apparatus is hardly worth carrying to the medical societies.

*** The observations in last week's report assigned to Mr. Blenkarne, were made by Mr. Robarts.

DUBLIN MEDICAL JOURNAL,

May, 1833.

HYSTERICAL DETERMINATION TO THE HEAD.—The utility of both nitrate of silver and spirit of turpentine in such cases, was suggested to me by the good effects these medicines are found to produce in epilepsy, particularly when it occurs in persons of a nervous and delicate habit; and since I have employed them in hysterical determination to the head, I have been able to overcome these and similar affections with much greater facility than formerly; of these, as has been already observed, the spirit of turpentine is best suited to the violent stages of the disorder, and may be given in doses of one or two drachms, to be repeated according to its effects. The best vehicle is cold water, some will bear and derive advantage from two or three doses of this medicine in the day, experiencing from its use a diminution of headach, and removal of flatulence, together with a moderate action of the bowels and kidneys. In some cases, as occurs also occasionally in the treatment of epilepsy by this medicine, it can-

not be persevered in, in consequence of the violent dysuria and hæmaturia it occasions; slighter degrees of these affections should not, however, prevent our continuing it. When the paroxysm has abated, or when the spirit of turpentine has failed, the greatest benefit may be derived from the nitrate of silver continued for five or six days at a time, in doses of half a grain four times, or even six times a day. When the bowels are constipated, there is no better combination than nitrate of silver with minute doses of compound colocynth pill, a formula, I believe, first recommended in dyspepsia by Dr. James Johnson, of London, and which I have found invaluable, not merely in the headachs of hysterical young women, but in those of men, particularly the habitual stomach headach, to which delicate and literary men are so subject.—*Dr. Graves.*

Dry Cupping.—The suction should be powerful, and should be sufficient to fix the cup for at least ten or fifteen minutes. In a young lady in Grafton-street, in whose case I first tried this method, its good effects were most striking; she had been lying for twenty-four hours, with her face somewhat swollen, her eyes open and unmeaning, unable to speak, and frequently agitated by violent hysterical convulsions. After the cups had been some time on, she recovered her consciousness and was able to speak. This result was the more remarkable, as she had, a year before, laboured under a similar but less severe attack, for which she was treated, by two of the most eminent practitioners in Dublin, by means of shaving her head, leeches, ice, &c. &c., a mode of treatment which left her in so weakened and nervous a state, that her removal to the country became necessary, and she did not recover her usual strength for several months. Mr. Barker has given me the particulars of a very curious case:—A lady of rank, living in the vicinity of Dublin, was occasionally attacked by violent determination of blood to the head, and each of these paroxysms was sure to induce before it ended a violent propensity to suicide, which she very nearly succeeded in gratifying on more than one occasion. This propensity, and the cerebral congestion which caused it, were afterwards removed, or rather prevented, by the timely application of dry cupping, as soon as the well-known premonitory symptoms of the paroxysm made their appearance.

Exhibition of Opium in the Form of Enema.—Dupuytren has recommended the exhibition of opium in the form of injections, in preference to the usual method of giving it by the mouth. The two following cases exhibit striking proofs of the utility of this practice, and its great superiority over the common method:—

Case 1.—J. B., aged 30, by profession a surgeon, was admitted into Sir Patrick Dun's Hospital on the 8th of February last, in an extreme state of emaciation and debility, in fact, a complete skeleton; indeed he considerably resembled the *living skeleton*, lately exhibited in France and in England. He had not the least fever; his digestive organs appeared quite healthy, his breathing natural, and he had no cough, nor did he complain of any pain in the head. To what then was the reduction of flesh and strength owing? Partly to the effects of disease, but chiefly to abuse of those two powerful medicines, mercury and opium. His constitution became more and more impaired, and a cutaneous eruption, in every respect resembling the milder varieties of rupia prominens, made its appearance, while an ulcer commencing inside the left nostril, completely destroyed the nasal cartilage, so that the tip of the nose had fallen in. From his account it would appear, that some portion of the spongy bones had been also destroyed; one of the spots of periostitis had evidently produced extensive exfoliation of the os frontis, but the part is now healed; he has no sore throat; his gums are sound, and his tongue perfectly clean and moist; he has no thirst, and his appetite is good; bowels quite regular. The few remaining spots of rupia, the arthritic swellings and pains, now become chronic, extreme debility, and an utter want of sleep, except when under the influence of enormous doses of opium, form the catalogue of his present complaints. For the last two years he has never had sleep at night, except in consequence of an opiate: he was first induced to take this medicine in order to relieve his pains, but latterly it is not pain, but the impossibility of sleeping except when under its influence, that has forced him to use it constantly. He has often taken *two ounces of Battley's solution in the day*! Very large doses of opium act on his bowels as an aperient, and the use of this drug never produces headach, dulness, furred tongue, thirst, nausea, or the least disturbance of the circulating system. For a few nights after his admission into the hospital, he got two drachms of *black drop* every night, but it was not enough to procure any sleep, and he consequently entreated me to double the dose; but I refused, and ordered the following treatment:—Three drops of *Fowler's arsenical solution* three times a day. A nutritious but mild diet; some wine at dinner; *sarsaparilla broth*,

one pint daily; a *starch enema*, with one scruple of *black drop* three times a day. The good effects of this treatment became soon apparent; his sleep gradually returned, and in the course of a fortnight was sounder and of longer duration than it had been for years. He daily gathered flesh and strength, and, in the course of a month, was so altered for the better, that, were it not for the depressed nose, no one could have recognised him to be the being whose misery, a month ago, had so strongly excited our commiseration. The arthritic affection has rapidly subsided, and with returning strength he is regaining the use of his limbs.

Case 2.—The following case exhibits the good effects of opiate injections in a manner not less striking than that just detailed. A professional gentleman of great abilities and strength of mind, about ten years ago was attacked with neuralgia of a very severe description. The disease, which was caused originally by cold, pursued a most anomalous course, giving rise to amaurosis of one eye, ptosis and permanent strabismus of the affected eye; contrary to the expectation of both Sir Astley Cooper and Mr. Brodie, to whom he was introduced by his friend the late Dr. Wollaston, the symptoms of cerebral disease made no further progress, but the neuralgic affection of one of his lower extremities became intolerable, occurring in paroxysms of extreme violence, and only to be alleviated by repeated doses of opium. After the lapse of some years, the neuralgia became complicated with pain and swelling of the knee-joint, which still further added to his sufferings, and rendered him a complete cripple. This joint is now permanently enlarged, and within the last two years the lower extremity of the femur seems to have formed an enormous exostosis of an equal growth all round its circumference, but not encroaching on the articulating surface of the bone, which still enjoys the slightest possible degree of motion, although it cannot be moved far from its flexed position. The neuralgic pains, if such they were, have within the last four years been worse than ever. During the paroxysms he has frequently been forced to take 100 grains of opium, much to his annoyance, for he found that it occasioned subsequent nausea and vomiting, stupor, and other unpleasant symptoms, while the constant repetition of this drug had completely destroyed his appetite, and what he most deplored, had sensibly impaired his memory and mental powers. At length he was advised to use it in the form of injection. The alleviation produced by this change has been most astonishing; half a drachm of laudanum thus used, when necessary, twice or three times a day, effectually alleviates his suffering, and does not produce any of the bad effects before enumerated. His appetite is now good, his spirits cheerful, and his powers of mind unimpaired.—*Dr. Graves.*

Gurgling in Flatulent Stomachs.—In fever I have witnessed several times a very peculiar species of dysphagia, evidently occasioned by flatulent distention of the stomach to such an extent that the lower portion of the œsophagus partook of this condition; at least, I conjecture so, for during the struggle of the dysphagic paroxysm, a gurgling noise was heard, as if the bit of food was met by a portion of air contained in the lower part of the œsophagus; my friend, Doctor Autenrieth, of Tubingen, has particularly remarked this symptom, or at least something like it, in what he calls the abdominal typhus fever of young people; for he says, if the patient takes any drink, a peculiar gurgling noise is heard, as if the fluid was poured into a lifeless bag. Now, in precisely such a case, Mr. Rumly and I saw a young lady affected, in addition to this noise, with so great spasmodic dysphagia, probably from the entrance of wind into the lower end of the œsophagus, that she altogether refused to drink. This phenomenon gradually disappeared, and the lady ultimately recovered; but it deserves to be remarked, that in general this symptom and the gurgling noise, described by Dr. Autenrieth, are very bad omens in fever.—*Dr. Graves.*

Small-Pox after Inoculation.—The following is especially authentic, and I publish it with the permission of Mr. Barker, of Great Britain-street. Mrs. Barker was inoculated with the small-pox in 1801, by Mr. Stewart, then Surgeon-General. The inoculation succeeded, and she had the disease favourably. The pustules were nowhere confluent, and were thinly scattered over her face, extremities, and body. The disease ran its usual course, and was sufficiently severe as to leave marks or pits in several places. A few days ago, Mrs. Barker was attacked very violently with fever, which, after three days terminated in a very copious eruption of varioloid; she could trace the infection to a child in small-pox, with which she had been in contact. Mrs. Barker was near her confinement at the time, and in three weeks after the accession of the varioloid, was delivered of a dead child, which was covered with the true variolous eruption, at about the stage

of pustular maturation. The same poison, therefore, gave varioloid to the mother, and true small-pox to the child. The small-pox communicated to the child in utero is not necessarily fatal. I have known a child born with it, survive. Another remarkable and perfectly authenticated case happened within the circle of my acquaintance:—A young lady, residing near Dublin, was vaccinated when an infant. There is reason to believe that the vaccination was not properly watched, so as to ascertain whether it had succeeded. When eight years old, this young lady caught the true small-pox from infection, the disease was not at any period of its progress dangerous, and left no pits. At eighteen years of age, she was again attacked, but the disease was now varioloid, and not attended by secondary fever. She did not escape, however, so well with regard to its consequences, for she was evidently marked. In such cases, as has been long ago remarked, the pits on the surface of the skin are very different from those left by the pustules of the small-pox.—*Dr. Graves.*

THE LANCET.

London, Saturday, May 18, 1833.

We have received the French journals up to Sunday the 12th of May inclusive. The last No. of the *Archives Générales de Médecine* was published on the 7th instant, the *Journal de Chimie Médicale* on the 11th, and the *Annales d'Hygeiene* on the 10th. Of these, the last is the only one which contains a single article of interest to the British reader.

From the *Lancette Française*, *Gazette Médicale*, and *Journal Hebdomadaire*, as well as from the letters of our correspondent, we learn that the *pseudo-concours* is in progress, but that this paltry mockery of a concours excites no attention. Why should it? Let the oral proofs turn as they may, the professor is already "appointed." Never was there a more odious, a more iniquitous piece of humbug. But what better could be expected, when the regulators of the proceedings, the *Conseile Royale de l'Université*, consist exclusively of the creatures of the double betrayer of his own foul blood, and of the liberties of his country?

ANATOMICO-LEGAL INVESTIGATION.

The medico-legal department of the *Annales d'Hygeine*, contains some very valuable papers. The first is a series of reports by MM. Chevallier and Boys de Loury, on the case of Ramus, who was murdered in Paris last August, by the administration of a dose of weak prussic acid, and decapitation during the insensibility induced by the poison. The murderer, as soon as the deed was accomplished, cut up the body into several pieces, some of which he threw into the Seine, and others he hid in various drains and private places. The principal points referred by the authorities to the medical examiners, were the identification of the pieces of the body, the determination of the question of decapitation before or after death, and the analysis of the contents of the stomach and intestines. The first of these was readiiy answered, by the uniformity of colour of the hair on all the pieces, the identical texture of the skin, the apposition of the various sections, and the fact of four of the cervical vertebræ remaining with the head, and three with the trunk. It was concluded that the decapitation had taken place during life, from the anæmic state of the viscera, the retraction of the divided parts, and especially from the collapsed and bloodless state of the heart. Lastly, the analysis of the gastro-intestinal contents, guided by the fact of a smell of bitter almonds existing in the stomach, led to the detection of prussic acid by the ordinary process, fully described in this journal. The chief interest attached to the chemical investigation is the detection of the prussic acid seven days after death. The medical and chemical reports here alluded to were drawn up before the apprehension of the assassin, and the conclusions they contained were subsequently fully borne out

by his confession. He was guillotined in Paris about six weeks since.

MEDICO-LEGAL INVESTIGATION.

The next article is of the highest practical value. It is the narrative of the investigations pursued in a case of *suspected* poisoning. Inquiries of this kind are the nicest and most difficult that the medico-legal chemist can be called on to conduct. He has usually no positive indication to guide him, and if he trust to vague notions and suspicions, he is almost sure to be led astray. In proportion to the absurdity of the suspicion, his difficulties increase, and arrive at their acme when the charge is totally devoid of foundation, for it may now be admitted that it is a matter of much greater facility to detect any of the recognizable poisons than to prove the absence of the whole of the poisons of that description.

The facts detailed in the present narrative, relate, briefly, to a woman jealous of her husband, determined to poison him, and for that purpose endeavouring to buy some arsenic. The vender, to deceive her, substituted gum arabic, in powder, for the arsenic, and she accordingly mixed the gum with a cup of coffee, and gave it to her intended victim. The husband's suspicions being excited by the unusual taste, the wife became terrified, and attempted to spill what remained. She was, however, prevented from executing this purpose, and the remains of the mixture were preserved for analysis, which operation was intrusted to MM. Girardin and Baruel.

The fluid was contained in a bottle, filled to the neck. It was of a whitish colour, and seemed to be very viscous; some oily globules formed at its surface. Guided by this indicator, the bottle was filled to the mouth with distilled water, placed in a warm situation, and the oily globules which rose to its surface, were removed every half hour with a pipette. About four drachms of oil were thus procured. This oil was free from any acrid or bitter taste, and possessed all the properties of olive oil.

The oil being removed, the remaining contents of the bottle were boiled in a water-bath, and then filtered. The filtration was extremely slow, but the fluid which did pass was quite clear, and there remained on the filter a clotted, greyish, large residuum. The limpid fluid was of a brown colour, and acid smell and reaction. Treated by a current of sulphuretted hydrogen gas, it underwent no change, even after twelve hours repose, nor on the addition of some drops of muriatic acid. The absence of the majority of mineral poisons was thus proved. It then remained to examine whether any vegetable poison could be detected, and what was the nature of the substances present, although no poison existed. The residual fluid was, for this purpose, placed in a retort, and distilled from a water bath to the consistence of a syrup. The distilled fluid had an alcoholic and acid smell and reaction. To ascertain what was the acid, and to separate the alcohol, the fluid was saturated with potash, and a thirtieth part then removed by distillation. This product was manifestly alcoholic. The original saturated fluid from which the alcohol had thus been removed, was evaporated in a glass capsule to one-tenth of its volume; this tenth being placed in a small retort, eight drops of sulphuric acid added, and distillation repeated, a colourless fluid, having all the properties of acetic acid, condensed in the receiver.

The syrupy matter in the retort was then mixed with strong alcohol in large quantities, and a flaky, filamentous, white matter, was separated in great abundance. The fluid was filtered. It passed with rapidity, had lost its viscosity, and the precipitate was collected, and dried in a vapour-bath. When dry it was whitish, of mucilaginous taste, and partially soluble in water. Treated with nitric acid, fumes of nitrous acid were evolved, and a sediment of mucic acid was produced, while oxalic acid remained in solution. The precipitate was thus proved to have been chiefly composed of gum.

The alcoholic filtered fluid was now evaporated to dryness, the product dissolved in water, and divided into three portions. Persulphate of iron added to one did not heighten its colour, as it would have done were opium present in any form. In the second, ammonia produced no precipitate, even after standing twenty-four

hours. Nitric acid added to the third, occasioned no change of colour, neither did the proto-muriate of tin; consequently no detectable vegetable alcaloid existed in the fluid examined.

There now remained to be examined the clotted residuum, which, after the first boiling and filtering, remained on the paper. It was insoluble in water, greasy to the touch, not changed in colour by iodine or sulphuretted hydrogen, by which qualities the absence of amilaceous matters, or soluble metallic poisons, was ascertained. Heated on iron, oily drops exuded, which inflamed like butter, and the remaining mass burned away, evolving a smell of cheese. To prove the presence of these two substances, a part of the mass was heated with ammonia, which dissolved the caseum, and left the butter in the form of white flakes, which fused when heated, and again became solid when cooled. Sulphuric acid, added to the ammoniacal solution, produced a white precipitate of caseous clots.

Lastly, to ascertain whether the precipitate contained any insoluble mineral poison, it was calcined in a platinum capsule. The cinder treated with nitric acid, and the clear solution thus obtained, was found, on examination, to contain not the least trace of copper, or other mineral poison.

By the preceding analysis, the substance examined was shown to contain alcohol, acetic acid, gum, sugar, oil, and milk. The analysts express some doubt whether the two first were not products of decomposition of the fluid examined. They conclude, moreover, by "denying the presence of any mineral or vegetable poison in the examined fluid." Our readers have thus been afforded a good example of the niceties involved in these inquiries. We do not, however, by any means, believe that the reporters were entitled to come to the peremptory conclusion they have deduced. All they could correctly state was, that no "recognizable" poison existed, &c. Without performing a *quantitative* analysis of a given weight of the fluid (say 100 grains), and finding a certain weight of each of its ingredients, for illustration, thus—

Water	50
Oil	4
Gum	20
Sugar	2
Caseum	10
Butter	3
Coffee dregs	8
Alcohol, Acetic acid	2
Ordinary saline matters	1
	100

without this the analyst merely finds that such ingredients exist in the substance, but he does not prove that they compose it altogether. Our readers will readily understand this important point, by considering the illustration we have given.

The remaining papers shall be noticed in another Number.

We trust that long ere this some of the blockheads who supported the election of his Royal Highness the Duke of Sussex to the Presidency of the Royal Society, have suffered the pangs of shame consequent on so foolish an act. Royalty and science! How the terms assimilate! As harmoniously as poison and antidote, ignorance and knowledge. The selection of a prince, *because* he was a prince, to preside over a society claiming to be considered as a scientific body, resembles topping the temple of science with a cap and bells. If such an institution as that of the Royal Society be not admired and esteemed for its accumulated stores of information, and its consequent utility, the whole concern sinks into a mockery, becomes a juggle before the community, and instead of affording an honourable protection to men of *real* attainments, it must be prostituted to the base and unworthy purpose of conferring the title of F.R.S. on individuals whose only claim to the distinction consisted in practising that mean and despicable species of sycophancy through the instrumentality of which, the paltry mock honour may be acquired. Did the "Royalist" party in this Society imagine that

the want of mental ornament would be more than compensated by the epicurean and bacchanalian pleasures of Kensington Palace? If so, the disappointment they now experience is not intellectual but sensual. The mischievous wights are stung where their feelings are most acute. The entertainments at the Palace have been few and far between, and the invitations partial; in short, the whole of the members have not been honoured by the civilities of the Royal President, and, strange to relate, amongst the individuals who have been thus slighted, are some in the highest degree distinguished for their scientific and literary attainments. In short, the etiquette now observed by the Duke as the President of the Society,—is as insulting as it is pointless, and tends to make courtiers or sycophants of the entire body of Fellows. Can it be credited, for example, that the Royal President declines to invite any Fellow of the Society to the occasional soirees at Kensington Palace, who does not happen to have undergone a formal introduction to him either at the rooms of the Institution or elsewhere,—his appearance at the former now being a rare event? Thus a previous crouching to some underling toad-eater, is the only passport to the scientific meetings at the Palace. We mention these circumstances with pain. The Royal Duke is not without sense, neither is he devoid of manly feeling. His ear, we suspect, is poisoned by some creature that is ever fawning and crawling about his person. It is, therefore, earnestly to be hoped, that all interested, petty-minded, advisers will be removed from his confidence, and that he will discharge his duty as the President of a Society which ought to consist of an assemblage of the first scientific men in the world. But in justice to the Duke it must be observed, that no exertions on his part can obtain for the Royal Society the high consideration which it once enjoyed, until it is purged of at least half the individuals who have contrived by some means or other to be incorporated amongst its fellows. The fact must not be concealed, that the title of F.R.S. is now seen attached to the names of individuals, whose literary claims would not justify their occupying the secretaryship of a parochial club. Instead of leaving the elections to the entire body of associates, an electoral committee, annually chosen by the Fellows, should regulate the admissions to the general body. At all events, if some change do not take place, and that alteration prove a great practical improvement on the present system, the Society will, if possible, sink to a lower position than the degraded one which it at present occupies.

THANKS to the talents, integrity, and industry, of Mr. WARBURTON,—the PRESIDENT and CENSORS of the College of Physicians, and the PRESIDENT of the College of Surgeons—those self-sufficient, selfish sinecurists of the National Vaccine Board—will no longer have the opportunity of drawing salaries from the public purse, in return for the only labour performed by them—that of applying to the treasury for the money. This board, in short, is purged of its useless and gaudy appendages, whilst all the valuable, the working, part of the machinery is retained, and without any reduction from the small salaries of the gentlemen who have discharged all the duties connected with the institution. The influence of Sir HENRY HALFORD is on the wane. That slippery nose, which used to penetrate into every medical sanctuary with impunity, is now receiving some painful pinches between doors and architraves, where gold-laced attendants were formerly in the habit of most servilely booing at the *entré* of the royal bulletin-signer. Sir HENRY should take the advice of an observer, if not of a

friend. He should quit the scene of his former exploits, and retire to his country seat, or wholly devote his *great* talents to the duties of private practice, and leave the colleges, and all other medical corporations, to work out their own regeneration, without putting their members to the pain of brushing off with their own hands the slimy creatures which hang about the walls of these decayed edifices.

ALARMED, and not without cause, at the prospect before them, the MASTER and WARDENS of the SOCIETY of APOTHECARIES have presented a "memorial" to the SECRETARY of STATE for the HOME DEPARTMENT, pretending to explain the advantages that have resulted from their administration of the powers of the Act of 1815, and the evils that may arise from effecting any change in the principle or details of that statute. At the same time it is our duty to state, that a negotiation has been opened by the occupiers of Rhubarb Hall and the Bats' Cave in Lincoln's Inn Fields. The two bodies, we suspect, in their secret proceedings, are prompted by one motive—that of self-interest. Thus, if the members of the College of Surgeons, Licentiates of the College of Physicians, and the students at our public and private schools, remain passive, we may have some cause for fearing—notwithstanding the upright intentions of the Government with respect to the proposed changes in medical law—that no just and general extension of the rights of the colleges will be derived from annulling or altering the power of the Worshipful Company of Apothecaries. We must act,—promptly act. "Time and circumstance" are in our favour; the disposition of the Government is friendly to the mass of practitioners, and favourable to the interests of the public, so far as those interests are concerned in the due cultivation of the science of medicine. In one paragraph of the Company's memorial, which will be found at page 256 of our present Number, we find this passage:—

"That the sums of money received by the Society of Apothecaries for certificates of qualification, are not more than sufficient to defray the necessary expenses of enforcing the law against incompetent and unqualified practitioners, and the other necessary expenses of administering the Act, and that no part whatever of the sums so received has been, or is, appropriated to the private purposes of this Society."

Whence the necessity of recording the concluding portion of this sentence if the former part of it is in accordance with the truth? Why, truly, if *all* the money received has been only sufficient to defray the necessary expenses, there was *none left* to be "appropriated to the private purposes of the Society." In short, the *public* appetite for the cash was so strong that there was none left to gratify the *private* propensity to palm the gold. Is it not true that the Society has received from medical students forty thousand pounds? And if so, what has become of the cash? Have they founded a single medical professorship, or even have they founded a single scholarship? No, not one; but the money has been expended, forsooth, in the prosecution of unqualified practitioners. Ay! no small portion of it has been handed over to lawyers, to persecute, to distract, to break up, to ruin, graduates of the Scotch and Irish Universities, and members of the Royal Colleges of Surgeons of London and Edinburgh; and while these heartless, these cruel, proceedings have been pursued, with unrelenting vigour, against respectable and well-educated practitioners, the LONGS, the EADYS, and the MORISONS, HAVE BEEN ALLOWED TO ESCAPE WITH IMPUNITY! Ought the members of a retail drug company to hold such a power as this, and to exercise it with the severity of a set of ruth-

less barbarians? Witness the proceedings in the case of Mr. RYAN, a highly respectable member of the College of Surgeons, and many others whom we could name. We say that the legislature cannot permit this Act to inflict further disgrace on the statute book. It is a foul blot on the not-over-white page of medical education; and Government, we feel assured, is disposed to expunge that portion of it which has already worked so much mischief, and will, if it continue to exist, inflict in hundreds of additional instances most outrageous acts of injustice. The Apothecaries Company, as a *drug*-company, should take care of the chemists and druggists, over whom (monstrous inadvertence in legislation!) they have now no power whatever.

In amending the law, however, we sincerely hope that Ministers will not be urged to proceed hastily, and thus frame an enactment suited to the purposes of only two or three parties. The law should harmonize throughout England, Ireland, and Scotland, and the rights and privileges of all the fellows and licentiates should be recognised as equal.

If, then, the members of the Colleges of Surgeons of Edinburgh and Dublin are to enjoy the privilege of practising medicine in England and Wales by virtue of their diplomas from those institutions, is it possible, is it consistent with any principle of justice, that members of the Royal College of Surgeons in London should be denied the like privilege? But members of Parliament cannot legislate for our wants unless those wants are made known to them. It is absurd and puerile to the last degree to grumble in our parlours over the difficulties against which we have to control, and not take a single step, or make one effort, towards their effectual and permanent removal. Private conversations with members of both Houses of the Legislature may effect much in producing an unobjectionable law; but as the truth communicated in private may be destroyed by falsehoods communicated also in private, it becomes essential at this singularly important epoch, that a discussion of our wants and grievances should take place IN PUBLIC. As it is perfectly certain that some new law will be enacted affecting the privileges of the medical corporations, it is our duty to strain every nerve to make it as perfect as possible,—in short, to render the Government every information towards the accomplishment of their wise and benevolent intentions.

The existing law, as it is applied to quacks and other incompetent practitioners, is too weak. It should be rendered sufficiently strong to rid society of all such destructive nuisances.

THE following is a copy of the REQUISITION which is circulating privately amongst the members of the College, and, we understand, is to be left at the medical booksellers for signature. Need we point out to our brethren of the commonalty the necessity of joining the request thus made, by attaching their names with promptitude? It is expected that the Apothecaries-Act-Amendment Bill will be in the House of Commons in a few days,—possibly before this journal can issue from the press.

"*Requisition.*

"*To the* PRESIDENT *and* COUNCIL *of the* ROYAL COLLEGE OF SURGEONS IN LONDON.

"Gentlemen,—We the undersigned members of the Royal College of Surgeons in London,—understanding that it is the intention of the Government to effect some alterations in the Apothecaries Act of 1815, in order to relieve the members of the Colleges of Surgeons in Dublin and Edinburgh from the necessity of obtaining the license of the Apothecaries Company of London to confer on them the right to prepare and dispense medicines in England Wales, in cases deemed medical,

—we are particularly anxious that the sense of the members of our College, generally, should be taken on the question, whether it is not advisable that the legislature should be addressed, praying that the diploma of the Royal College of Surgeons in London may be deemed a sufficient authority for the legal exercise, by its possessor, of the practice of medicine in all its departments.

"Feeling deeply interested in the construction of any bill that may be introduced to the notice of Parliament, we respectfully but most earnestly entreat that you will at your earliest possible convenience, convene a meeting of the members of the College either in the Theatre of the Institution, or in such other place as may be deemed more suitable, in order that the subject herein mentioned may be seriously and deliberately considered by them."

We do not know that we are warranted in noticing the falsehoods which are constantly promulgated by the "impostor" of the *Medical Gazette*. Having stated in The Lancet, that under the operation of the Act of 1815, the Apothecaries Company had "succeeded in extracting forty "thousand pounds from the pockets of "medical students," the impostor alleges that "this statement is absolutely false, and hyperbolically absurd." In hazarding such an assertion, of course the hired assassin's scribe has done no more than execute the bidding of his masters; but we may condescend to inform the impostor, that the calculation is founded on the list of licentiates published by the Worshipful Society,—a document which was forwarded to us from the office of the Company.

The cholera, we learn, has entirely ceased at Havannah, but has visited Matanzas, and a month since was proving fatal to between two and three hundred persons a day. It has also reached Mexico, and many other places in the surrounding country.

The influenza, under the more formidable-looking designation of "La Grippe," prevails in every quarter of Paris, and is there spoken of as being "very troublesome" to the inhabitants, notwithstanding the existence of a brilliant sky and a steady temperature of the atmosphere. A hundred thousand patients are reckoned as under treatment for it.

A Treatise on obstructed and inflamed Hernia, and on Mechanical Obstruction of the Bowels Internally. Second Edition, with an Appendix, containing additional Cases and Observations, with Diagrams, Replies to Reviewers, &c. By Henry Stephens, M.R.C.S. London, Highley, 1831. 8vo. pp. 214.

In consequence of the vast number of trashy publications which issue from the press, the business of medical reviewing is one of the most unsatisfactory and irksome that can well be conceived. It is a department of literary labour in which it is impossible to give satisfaction, either to authors or readers. If the journal fail to contain a certain number of pages of reviews, then it is thought that the new works are neglected; whereas if it fail to notice recent publications, or dismiss them briefly, then the authors themselves are wont to exclaim that the journal is harsh, or unjust in its criticisms, or is regardless of the reputation of authors, and the interests of its readers. Observing how frequently it happens in medical literature that books are sent before the public with forms of puff and announcement which are calculated to furnish an impression of their vast importance, but at the same time finding, on examination, that they are written and advertised with no other view than that of acquiring for their authors a certainspecies of notoriety, it is seldom that we take up a new publication unless under that unfavourable kind of impression which such practices are calculated to produce. The physicians and surgeons of some hospitals and infirmaries appear to consider that it would be *infra dig.* for them to continue in office more than a few months, without offering to the public a volume of experimental inquiries, physiological researches, or facts and observations connected with some structure or function of the human body, though not one out of twenty of such works is destined to occupy a place in any library of

practical medicine. It was one of the manœuvres of the pures and the medical journalists of former years to give encouragement to this system of puffing the pages of the self-styled "heads" of the profession, and thus discourage surgeons in private general practice from engaging in, or attempting to hold, even the most subordinate stations in the field of medical literature. The late Mr. Hey, of Leeds, commenced the dispersion of that cloud which had so long obscured the real talent and usefulness of surgeons practising in all the branches of the profession. That gentleman showed that practitioners who could furnish medicine from their own surgeries were *not* incapable of observing diseases with the eyes of physiologists, but were as competent to found philosophical deductions on their experience, as ever were the pampered favourites of the rotten medical corporations. The labours of Mr. Hey gave rise to much expectation as to the value of the practical works which would be furnished to medical libraries in consequence of the excellent example thus shown to those medical gentlemen who belonged to the same rank of the profession. Nor has this feeling been wholly disappointed. Within the last few years, very many works have been published by surgeons in general practice, which far outshine, in point of practical utility, the vapouring and conceited performances of those individuals who affect to know everything in medical science, but appear at the same time to be incapable of instructing even the junior members of the profession in the least important of its facts and principles.

Of the class of useful productions to which we allude, the volume now before us must rank as one of the most valuable yet published on the subject to which it is devoted. We ought long since to have reviewed this work, but it is not extraordinary that amidst the mass of literary rubbish by which we are surrounded, a work of decided value should now and then escape observation for a period not warranted by other circumstances. This remark may be applied with strict propriety to a few other publications, which, along with Mr. Stephens's, ought before this to have obtained a critical examination from us. Regretting the delay which has taken place, we strike off at once to examine the highly-important subject which has engaged the attention of our author.

Under the head of "Obstructed Hernia," Mr. Stephens includes all those states of obstruction from a hernia which are not dependent on, or caused by, an actual strangulation of the included intestine. Thus, any state of stricture which acts more by obstructing than strangulating the intestine, he considers ought to come under the head of "obstructed hernia," instead of remaining under that of "slow or chronic inflammation," or "incarceration," or "engouement." But the particular object of his treatise is to call the attention of the profession to a peculiar but important species of what he terms "obstruction," which arises not as a consequence of any kind of strangulation, or of any state or degree of constriction, but depends upon the intestine contracting an adhesion to any part with which it may be in contact (most frequently the hernial sac), by means of which adhesion the function of the intestine and its peristaltic movement are at first interrupted and impeded, and at length totally arrested.

We cannot avoid expressing our wish that Mr. Stephens had adopted a less objectionable term than "obstructed hernia." It is one which by no means explains the peculiar condition of the parts which he has elucidated. The *constricted* hernia is an *obstructed* hernia in a much more literal sense than is that here described as resulting from a membranous adhesion. In fact, the obstruction of which our author treats, exists even where there is *no* hernia, and, consequently, the name here applied to this form of disease, is particularly inappplicable. In making this objection, we must in candour admit that no term occurs to us at this moment, the announcement of which would convey any correct notion of the obstruction to the passage of the fæces, by the occurrence of a membranous adhesion of the intestine to the parts surrounding that canal.

Mr. Stephens does not waste time on long and well-understood definitions, nor

does he enter into tedious descriptions of hernia, but proceeds straightway to call attention to views and matter altogether new, and presents to us at once the cases and facts upon which his ideas were first raised, and are now supported.

In the month of September, 1824, our author was called to a woman, who, three days previously, had been labouring under symptoms of disorder of the stomach and bowels, as occasional sickness, with a slight degree of pain in the abdomen, and constipation. The symptoms were of too mild a character to excite suspicion of hernia, until the sixth day, when the matter assumed a fæcal appearance, and then an inquiry into its nature was made, which was answered by the patient negatively (she not understanding what was meant by a rupture). The symptoms having a different aspect from those which exist in strangulated hernia, our author's suspicions were not strongly awakened, and a minute inquiry or examination was not, therefore, made. The symptoms were the reverse of an acute state of disorder or excitement, which is characteristic of strangulated hernia; they exhibited a character of nervous depression, and an alarming state of sinking only, accompanying which was a vomiting of fæcal matter, and obstinate constipation. On the eleventh day from her attack, she mentioned that she had a swelling on the side of the abdomen, which had existed twenty years. This proved to be a ventral hernia; but it was not strangulated or in any degree constricted, it readily receded upon pressure into the abdomen, with a gurgling noise, but returned when the pressure was removed. It was not tense, nor did pressure upon it give pain, but as we before observed, caused its immediate reduction. Our author concluded that the symptoms arose from some internal cause of disorder, and were not connected with the hernia. On the following day (Friday), he learned that she had been long subject to colic in the bowels, and his reflections upon the case led him to believe, that the symptoms might be produced by some mechanical impediment connected with the hernia; this determined him to propose an operation, with a view of deciding if relief could be by such means obtained Her friends urged her apparently dying state as an objection, but on the following day yielded to his earnest solicitations. Mr. Stephens operated, and found a portion of loose reducible intestine within the tumour, which easily passed into the abdomen, his finger passing through the opening with it, but one small portion of the intestine was irreducible, it being united by adhesions to the hernial sac. The operator separated the adhesions and returned the bowel, and the result was a perfect recovery.

Our author approves of Sir A. Cooper's practice of purging a patient after operations for hernia, as he believes the sooner the functions of the intestines are restored, the more certain and speedy is the recovery. The sickness and other symptoms ceased in his patient, after the operation, but the vital depression was not thoroughly removed, until there had been copious evacuations from the bowels. The following extract contains our author's reflections on this point:—

"The above case was to me exceedingly important, it opened to my mind new views of the nature of hernia, and showed plainly, that it may prove fatal from other causes than strangulation. All writers upon the subject have recommended the operation for hernia in cases of strangulation only, and surgeons of the present day would not think of operating in a case where strangulation would not be supposed; yet, simple adhesions of the hernia to the sac may produce (as the above case proves) symptoms, which though not so quickly, are, nevertheless, not less surely fatal than those occasioned by strangulation."

Mr. Stephens's attention was still further awakened by a new case to which he was called in consultation with another practitioner in June 1826. The symptoms were of the same appearance as the former case, the woman having had previous colic in the bowels. His colleague who had attended the case from the commencement, she having been ill several days, had observed that the case did not present the symptoms of genuine enteritis, and had considered it as one of universal character. Mr. Stephens suggested the idea of its being connected with hernia, which was dissented from at

first by his colleague, no doubt from the different aspect of the symptoms. On a relation of the case we have sketched, the other practitioner coincided with Mr. Stephens's views. The patient was exceedingly corpulent. Upon examining the abdomen, one, amongst many prominences of fat, appeared larger, and had a different character from the others, but conveyed no certain indication of its being hernia. Our author suspected that a hernia was protruded beneath. The symptoms indicating no immediate danger, and as the existence of hernia was by no means certain, all idea of operating was postponed, until it should be manifest that no other relief could be given. The bowels were solicited by injections, and the irritability of the stomach endeavoured to be calmed by anodynes. She kept gradually sinking; an operation was proposed, but objected to by the patient and her friends, who wished to postpone it to another day; at which time she died, just six days from the time our author first saw her, and she had been ill several days previously.

On examination, after cutting to a considerable depth through fat, &c., the sac of a hernia was found, upon cutting into which a cavity was seen, containing a small portion of adherent intestine. A canal was found leading from it to the umbilicus, along which Mr. Stephens passed his finger by the side of the intestine, and through the umbilicus into the abdomen. Upon inspecting the body afterwards, no trace of inflammation was discovered, with the exception of the small portion of intestine which was in the hernia, which was discoloured; which discolouration, less in degree, could be traced a few inches above and below. "Here then," says our author, "was a hernia, which had caused death, without any stricture or strangulation." My colleague was now, as well as myself, perfectly satisfied that if the patient and her friends had consented to an operation the day previously, her life might have been saved, and also that death from adhesion of the bowels may take place as surely as from strangulation. The above cases are, we consider, of themselves sufficiently conclusive as to the fact of a simple adhesion producing obstruction and death, but other evidence was wanting to prove the frequency of such occurrences, and accordingly, from amongst the many inexplicable cases of hernia which are continually occurring, the author has judiciously selected several, the mystery attending upon which cannot be resolved without a reference to the power of adhesions.

The author does not believe that it is so much the *extent* as the manner of the adhesion which gives rise to the obstruction. An adhesion of a considerable length of the intestinal tube is, in his opinion, comparatively harmless. So far as he has observed, it is "an adhesion of a small part of the intestinal tube, which is most likely to cause a fatal obstruction. Such an adhesion, drawing and fixing the intestine out of the regular line of its convolution, gives it *an angular, or acutely bent position*;" and it is this unnaturally bent position which, in his opinion, is the cause of the obstruction. Appended to the second edition is a wood-cut explanatory of this adhesion.

Mr. Stephens has proved, that what have been usually called "the symptoms of strangulation," can exist without any kind or degree of constriction whatever. That this opinion has not previously prevailed, may, he thinks, be collected from the following extract from the statements of Mr. Lawrence (page 62):—"That the symptoms of a strangulated hernia arise from the pressure of the stricture on the protruded parts, and that this cause is not only adequate to that effect, but indeed the only one that can be assigned, is too clear to admit of any doubt."

From the work before us, it appears that the symptoms of strangulation, as they are called, are not peculiar to a state of strangulation or constriction of the intestinal tube, but are common to any mechanical impediment to the peristaltic movement; strangulation producing the most violent degree of those symptoms, and a milder form of them attending the obstruction from adhesion, whence, he says, "obstructed should be the general name, instead of *strangulated* hernia," the particular cause of obstruction being otherwise defined.

Since the first publication of the work,

Mr. Stephens, it appears, has collected additional and very conclusive evidence in favour of his views. Amongst other cases, he quotes one published by a Mr. C. M. Burnett, under the designation of "Obscure Case of Hernia," in a contemporary journal for April 1829, a case which occurred at St. Bartholomew's Hospital, and which he cites as fully proving all that he has advanced.

In July, 1829, a case also was related by Mr. Hewson, of Lincoln, which the author considers as bearing full testimony to the truth of his opinions in the following concluding remarks:—

"In the *Medico-Chirurgical Review*, July 1st, connected with a review of Mr. Stephens's work on Hernia, I find the following passage inserted by the editor of that valuable journal, p. 113:—No doubt can exist, nor has at any time existed, that bowels confined by adhesions in hernial cases, will not go on with their natural functions so fully as when loose and floating in their native cavity. But the question is, will adhesions, *per se*, occasion a fatal obstruction to the office of the gut? Mr. Stephens says they will; and the issue is with him and his surgical brethren. For our own parts we doubt whether such be the case; nor can we imagine that a patient will die from this cause alone. The case is very different where the adhesions are so arranged as to act like a stricture in the gut, or when the latter is so placed as by being convoluted on itself, or in any other manner prevents the egress of matter from its cavity. In the above case, there was no stricture or diminution of the calibre of the gut, but a simple adhesion between the omentum and intestine, yet this proved amply sufficient to produce death, with all the symptoms of incarcerated hernia."

We now proceed to an examination of the remaining parts of the treatise, which are of an equally instructive character.

Another pathological division of hernia is here designated "Inflamed Hernia;" and under this division is included most of those singularly fatal cases which have confounded and puzzled the surgeon, from the time of Mr. Pott to the present period.

It is well known, that operations upon large hernia, particularly umbilical, are rarely successful; this, the author considers to be owing to the hernia not being in a state of simple constriction, or strangulation, (upon the removal of which the symptoms usually subside,) but toits being in a state of inflammation, arising in the hernia as a consequence of the adhesions and alterations of structure which the parts have acquired during their long protrusion from the abdominal cavity. It is well known, that frequently when the operation is performed, there is no stricture found, or where it exists it is so slight, that the surgeon is often puzzled to account for the symptoms, and their continuance. According to the explanations of Mr. Stephens, the cause of fatality is easily seen. Inflammation excited in a diseased protrusion, and extending within the abdomen, is not to be cured by a surgical operation. The existence of omentum in a hernia appears to Mr. S. to be a prolific cause of inflammation in a hernia. The treatment recommended logically follows the nature and causes of the symptoms which occur.

A section of the work is devoted to the consideration of a probable method of *radical cure*, in which Mr. Stephens advises, where an operation for hernia is performed, a particular method which he believes would prevent any future return of the protrusion. He details an experimental and interesting operation for cure upon a pointer bitch, which we are disposed to regard as a conclusive proof.

Another division of the work is entitled "Remarks on Mechanical Obstructions of the Bowels, within the Abdomen." It contains some valuable directions upon the method of distinguishing mechanical, from other causes of internal obstructions. The following extract, p. 126, explains his views upon the subject:—

"The intestines within the abdomen have naturally no fixed connexion; they are suspended in such a manner within that cavity, as to allow of very extensive, and what I should term, floating, movements. That this particular formation is well adapted to the function they have to perform, is very evident. If they had consisted of one straight tube, their office might have been carried on by the force of gravity, they remaining as passive agents; but consisting as they do of various lengthened convolutions, now ascending and now descending, it is plain, that without a proportionate and constant activity of this tortuous tube, a regular passage through it could not

be maintained. This action of the bowels consists in a vermicular sort of motion, performed by means of the muscular structure with which they are provided; but it is clear, that this particular motion cannot be perfectly carried on, unless the intestines are loose and unconstrained, which, in a natural state, they are. But the intestines are liable, from various causes, to contract adhesions to different parts of the abdomen with which they may be accidentally in contact; those adhesions, in many instances, produce little or no derangement, but in many others, they are, without doubt, impediments to the efficient performance of the peristaltic action; and, in this way, I think, may be explained the occasional obstructions, attended more or less with pain, to which some people are subject. It is probable also, that some cases of constipation owe their origin to causes of this nature. Adhesions may produce, in some cases, only a trifling and occasional disorder of the bowels, which the person may feel throughout the whole period of his life, but which never increases, because, probably, the position in which the bowel has adhered is not the most unfavourable, nor has the adhesion proceeded beyond what was first produced; but in other cases, the bowels may be so completely fixed, and in so unnatural a position, that their regular movements are, at first, partially, and at length, totally suspended. If symptoms of ileus occur in a person, from a cause of this nature, it is evident that no permanent relief can be obtained without the intestines are released by an operation."

Mechanical obstructions of the bowels are divided by the author into acute, subacute, and chronic. The distinguishing signs of these are given, and the operation of gastrotomy is recommended in certain cases, as a dernier resort. The author says that he has been accused of temerity and rashness for this last recommendation. The following is his reply:—

"If it could be shown, that relief in such cases is *impossible*, the accusation would be just; but as wounds of the intestines, incisions into the abdomen, &c. &c. have frequently occurred without proving fatal; and as the operation, I advance has been successfully performed, under circumstances very unfavourable, I cannot quickly acquiesce in the charge against me on this score. I have been condemned as if I had indiscriminately recommended the operation in all cases; whereas, I have distinctly stated, that the operation is not to be undertaken until it is proved that the obstruction cannot be removed by other means; nor unless the symptoms point out with a tolerable degree of precision, that the obstruction is mechanical, and also give some good grounds for conjecturing its probable situation. Many operations which are continually performed, are much less justifiable than this; for let it not be forgotten, that it is recommended *only* because there is no other possibility of saving the patient."

The author founds his chief hope of success on the circumstance that the patients appear to die from the suspension of the function of the bowels, and, the decline of the vital powers, and not from any destructive disorganization produced by inflammation. He has quoted cases illustrative of this peculiar fact.

In the first edition there is an appendix containing an attempt at a correction of a physiological error relative to the difference in size between the male and the female bladder. The greater comparative size of the latter, the author says, is an effect of pregnancy, as it does not exist in animals which have never been with young, or in those which have been spayed. A longer retention of the urine from motives of delicacy, was the cause usually assigned by lecturers; but the existence, as stated by the author, of the same peculiarity in the brute, puts the assumption of "motives of delicacy" out of the question as a cause in the human species. The female sex, however, can well afford to be deprived of this long-quoted evidence of their modesty and delicacy.

In conclusion, we strongly recommend Mr. Stephens's Treatise to the perusal of our professional brethren. A knowledge of the facts and inferences which it contains, is essential to a correct understanding of the pathology of hernia, and the various mechanical obstructions to which the bowels are subject—and we must candidly say, that we know of no book which contains information of more practical importance on the subject than this volume.

MEDICAL REFORM.

MEETING OF MEDICAL GENTLEMEN AT SAVILLE-HOUSE, LEICESTER-SQUARE.

THE meeting advertised to take place at the above house on Tuesday the 7th instant, to petition the House of Commons "to establish the *concours* in this country," was held accordingly, Dr. Granville in the chair. A correspondent has furnished us with a report of the proceedings from which we abstract the following account. A number of medical students also attended the meeting.

The CHAIRMAN stated, that they had assembled for the purpose of agreeing to a petition to the House of Commons, founded on certain resolutions passed at a previous meeting relative to the injurious effects of the present mode of electing professors, lecturers, physicians, surgeons, and other officers, to the public medical institutions of the country,—a mode which was silently, yet unerringly working the degradation of the medical profession in England. The Petition had been drawn up by direction of the former meeting, and would be read to the present assembly, with the view of ascertaining their opinion as to its propriety. Although the whole profession in this country might be unable to give its assent to the principles it embraced, because of the difficulty of obtaining so large a number of assents, yet if those principles were just and sound, and well supported by facts, the present concurrence with it, though limited as to signature, must be eventually assented to with as much cordiality, as if the Petition bore on its face the name of every member in the profession. With regard to the concours he would state, that in framing a plan for its establishment in England, the machinery had been considerably simplified, and that the time employed in working it was limited to one day, while the principle of the ballot in its greatest purity had been adopted with respect to the decision of the examining body.

The Chairman then called on the Secretary (Mr. G. H. Butler) to read the Petition.

This document pointed out, first of all, the present corrupt mode of obtaining appointments to the public medical institutions—hospitals and schools, and its injurious effects, and then proceeded "to suggest, that, independently of the entire abolition of the monopolies of medical corporations, and the setting up in their stead of a free and equalized system of medical education and medical legislation," the examination of candidates for public medical offices should be conducted on the principle of the *concours*. The Petition proposed that the Board of Examiners for this purpose should consist of seven or more properly qualified medical men, "summoned" by the Home Secretary of State from the neighbourhood in which the vacancy occurs;—Examinations to be public, and completed in one sitting, and conducted in English;—The tests of qualification to be derived from the previous writings of the candidates,—personal answers to questions on the principal branches of medical science and practice, &c.,—the composition of a paper having "a bearing or immediate relation to that department of the profession which the candidate aspires to occupy,"—production of "testimonials" from bodies or courts recognised by Government,—demonstrations and operations on the dead body by surgical candidates,—the Materia Medica to be described by embryo apothecaries,—physician and surgeon-accoucheur candidates to display a knowledge of obstetrics, &c. Each Examiner *privately* to mark on a paper his estimate of each candidate, and deposit his decision secretly in an urn, to be inspected by two scrutineers appointed by the candidates.

When the petition had been read,

Mr. DERMOTT advocated the principle of the *concours*, referred to its approval by several medical journalists, commented on the various views with which they regarded its practical application, declared his opinion as to the fitness of the present moment for advocating its adoption, and contended that the possibility of its abuse could be no argument against the *concours*. They had met that day, he said, to recommend a plan for a *concours* which would hardly admit of any abuse. It had been remarked that the present system worked well, for there were many clever men occupying chairs under it. But it was a combination of money, influence, and ability, that had elevated those gentlemen, and not talent alone; while, in the majority of instances, the former had everything to do with it, and talent little or nothing, for the mere daily routine of duty through which some of them went, was such as the most *mediocre* degree of talent, aided by the extraordinary opportunities of gaining experience which occurred in the hospitals, was fully equal to. Few of these would occupy their present offices under the *concours*. He did not, in conclusion, agree with every part of the proposed Petition, and wished it to be read clause by clause, with a view to some alterations.

Mr. Butler said it was drawn up on the principle which pervaded one before proposed by Mr. Dermott, but worded in a more humble tone of address. He warmly approved the exertions made by Mr. Dermott, in aid of medical reform, and cordially advocated a plan by which an impartial court of learned and scientific men would be substituted in medical appointments, for a drawing-room coterie of lords and ladies. He trusted this step would lead to other important changes.

Mr. Lunn having made a few observations, the petition received some verbal alterations, and was submitted to the approval of the meeting,—when Dr. Lynch expressed his surprise that a meeting of medical reformers should omit to notice in any plan of reform, the extinction of the absurd distinctions which disgrace the profession under the titles of surgeons, physicians, and apothecaries. He was checked, however, by the Chairman on a point of order, who said the meeting had met for a specific object, and it was his duty to see that its time was not uselessly taken up. The petition was then adopted unanimously, and a resolution carried, that it be entrusted to Dr. Baldwin, M.P. for presentation. Votes of thanks were then passed to Mr. Dermott and the Chairman, and the meeting separated.

MEMORIAL

ADDRESSED BY THE

COMPANY OF APOTHECARIES,

Bridge-Street, Blackfriars,

TO LORD MELBOURNE, MAY 8, 1833.

"To the Right Hon. Lord Viscount Melbourne, his Majesty's Principal Secretary of State for the Home Department.

"The Memorial of the Master, Wardens, and Society of Apothecaries, of the City of London,

"Showeth.—That the Act for regulating the practice of Apothecaries in England and Wales was passed in the year 1815, with the full concurrence of the medical profession in England, and was loudly called for by the then state of medical knowledge.

"That the act has been impartially and honestly administered, and the Court of Examiners of the Society, by their attention to the medical education of students, and by requiring from time to time a progressively increasing course of study, now equal to the medical education required by any college in Great Britain, have most essentially improved the schools of medicine in England, as well as the state of medical science in general; and the general practitioners of medicine throughout England and Wales, who have been educated in conformity with the regulations of the Court of Examiners, are now fully competent to all the duties of their profession, and are entitled to, and actually possess, the confidence of the public.

"That the power of examining persons who are about to commence practice as apothecaries can in no wise be considered a 'monopoly,' inasmuch as the persons who examine the candidates for certificates of qualification have not the most remote interest in or connexion with any school of medicine, nor can any teacher in any branch of medical science become a member of the Court of Examiners.

"That the clause in the Act of Parliament, whereby an apprenticeship of five years is required to be served by persons before they can be examined, was not proposed by the Society of Apothecaries, but was introduced into the Act in the House of Lords. But the Society beg to remark, that a preliminary education, in the nature of an apprenticeship, is absolutely necessary, as well to lay the foundation for future acquirements, as for the moral control of students from the age of sixteen to twenty-one, which control cannot be effectually exercised at any medical school or hospital.

"That those persons who state that an apprenticeship is highly injurious to medical education, must be very ill-informed upon that subject; for it is very well known than an apprentice has the opportunity of acquiring most valuable professional information from a suitable course of reading, under the direction of his master, and from seeing cases which occur in his practice.

"That attendance on the physician's practice at an hospital, does not afford to a student the whole of the instruction in practical medicine of which he stands in need, inasmuch as one-half of the deaths which annually take place are of children under five years of age, and of the aged above seventy, which cases are very rarely received within the wards of an hospital, but are attended almost exclusively by general practitioners, consequently coming under the observation of their apprentices.

"That the different colleges and corporate bodies in Scotland who are seeking to obtain an alteration in the Act of Parliament for regulating the practice of apothecaries in England and Wales, by rendering the diploma of those bodies equi-

valent to the certificate of the Court of Examiners of the Society, are endeavouring to obtain for their licentiates a more extensive privilege in England than their diploma confers in Scotland; inasmuch as the diplomas of the University and of the Royal College of Surgeons in Edinburgh, do not confer any right on the holders of them to practise as general practitioners in Glasgow, or within the counties of Lanark, Renfrew, Ayr, and Dumbarton, over which the jurisdiction of the faculty of physicians and surgeons of Glasgow extends; nor does the diploma of the Faculty of Physicians and Surgeons of Glasgow confer any right within the jurisdiction of the College of Surgeons of Edinburgh; nor can a person having a diploma or certificate from any college in England, or from the Society of Apothecaries, practise in Scotland without undergoing the examination, and obtaining the diploma of the Scotch colleges.

"That numerous instances have occurred (several within the last twelve months) of graduates and members of Scotch universities and colleges having been rejected by the Court of Examiners of the Society, in consequence of their having been found incompetent to practise as apothecaries.

"That should the prayer of the petition presented to Parliament by the Scotch universities and colleges be granted, one effect thereof would be to authorise those persons to practise immediately, who have on examination been found incompetent to do so without further professional study.

"That the establishment of several different tribunals would give rise to very mischievous inequality of examination, and tend progressively to great laxity therein, and to lower the standard of the required attainments, more especially wherever it may happen—as it now does, at the different universities in Scotland—that the teachers are also public examiners.

"That the admission of persons to practise as apothecaries who have not received certificates from the Court of Examiners of the Society, and been announced in the list annually published in conformity with the Act, will deprive the public and the society of the means of ascertaining the illegal practitioner, and will thereby give an opportunity for ignorant and incompetent individuals, to whom the health of the public cannot be safely entrusted, to commence and continue in practice in defiance of the Act of Parliament.

"That the sums of money received by the Society of Apothecaries for certificates of qualification are not more than sufficient to defray the necessary expenses of enforcing the law against incompetent and unqualified practitioners, and the other necessary expenses of administering the Act, and that no part whatever of the sums so received has been or is appropriated to the private purposes of the Society.

"That there are now in England numerous schools of medicine, all of which, with the exception of a few in London, have been established since the passing of the Act of Parliament, at great expense to the parties who have established them.

"That one effect in the alteration of law sought for by the Scotch universities and colleges will necessarily be to prove a serious injury to all the schools of medicine in England.

"That at these schools, including those in London, there are now attending nearly 1300 students, exclusive of nearly 2000 apprentices in other parts of the kingdom.

"That 6498 persons have been examined by the Court of Examiners of the Society since the passing of the Act in 1815, to 5769 of whom certificates have been granted, and the number of general practitioners in England and Wales is now upwards of 10,000 persons.

"Your memorialists therefore beg to draw your lordship's serious attention to these circumstances, trusting that due consideration will be given to a subject of such high importance to the interests of the profession and the public, and that an opportunity will be afforded to the Society to show, as they are prepared to do, that the Act of Parliament has been properly and efficiently administered, and to refute any statement which has or may be made against the Society, and to show that all the benefits which the Act of Parliament was intended to afford to the public have been fully attained.

"8th May, 1833."

POISONING

FROM THE UNINTENTIONAL ADMINISTRATION OF

PRUSSIC ACID.

[A CORRESPONDENT, who has authenticated his communication, has forwarded to us the following case. A report of the proceedings on the Coroner's Inquest appeared at the time in the newspapers.]

MRS. MARY ROCHER LATTEN, wife of a policeman, residing in University-street, Tottenham Court-road, on the evening of Saturday, March 30th, was attacked with severe pain in the head and jaw, caused by a carious tooth which she was unwilling to have extracted. On the following Sunday morning she sent for Mr. Clap-

ham of Francis-street, who ordered her a gargle, composed of myrrh, two drachms of laudanum, and a little water and honey. He also applied twelve leeches to the temples. He again visited her at 4 p. m. On Monday morning, at nine o'clock, he also called, and informed the husband that he considered her feverish, and would send her a bottle of medicine. He accordingly wrote the following prescription, which was to have been made up by his assistant, Mr. Manell:—*Saline mixture*, 8 ounces; *tincture of hyosciamus*, 1½ drachm; *powdered rhubarb*, half a drachm; *Epsom salts*. 2 drachms. Of this mixture three tablespoonfuls were ordered to be taken every four hours. Immediately above this in the surgery-book was another prescription, the second article of which was, three drops of prussic acid. In the hurry of business, the assistant unfortunately cast his eye on the words "prussic acid" in the previous prescription, and put a drachm and a half of that acid to his mixture, instead of hyosciamus, which was omitted. The bottle, labelled according to the correct prescription, was sent, and in ten minutes afterwards was administered by a female named Vaughan, in the husband's presence; no effect was perceptible for a minute, and then the first evidence of the poison appeared in the eyes, which seemed bursting from the head. To use the husband's expression, "they were almost dragged out of the sockets." She then complained of excruciating pain in the temples, and desired that her head might be pressed between somebody's hands to prevent its exploding. Vomiting next commenced; it at first consisted of the contents of the stomach, and afterwards of blood, which came up in large clots. The lower extremities were now thrown into the most powerful action, and a stool and chair which were near her were kicked to the other end of the room. The fingers became rigid and contracted, and the arms, after a few powerful efforts, in which great muscular strength was exhibited, grew quite stiff, bidding defiance to the exertions of two men to move them, or open the fingers, although the body and lower extremities were still violently convulsed and jactatory. At this stage of the melancholy scene, the husband went for Mr. Clapham, whose residence being near, he reached the unfortunate sufferer in two minutes. On his return, Mr. C., being ignorant of the nature of the draught she had swallowed, pronounced the case to be one of cholera. The husband expressed his surprise at this, as the symptoms by which that malady is ushered in, were wanting, and declared his conviction that she had received some poisonous substance in the draught. Mr. C. being still ignorant of the nature of the draught, said, that had she taken the entire contents of the bottle, it would not have produced the effects which he beheld, and tasted its contents to show how innoxious it was. As no time however was to be lost, he hurried home for the purpose of obtaining an emetic, and on questioning the young man who had prepared the draught, the dreadful mistake was then discovered, Mr. Manell discovering the error he had committed. On Mr. Clapham's return with the emetic, he found the limbs of the upper and lower extremities so rigid, that it was impossible to move them. The actively convulsed state of the muscles of the body had subsided and given way to a heavy motion, according with the respiratory inspiration, which was long and laborious. It was now evident that death was fast approaching. The teeth were so powerfully closed that it was with difficulty they could be separated; the mouth was covered with white foam, which came abundantly from the nostrils; the eyes were fixed; cold perspiration poured in streams from the forehead, and covered the chest and neck; the fingers were firmly contracted within the palms. By great exertion the teeth were separated, and some tartarised antimony solution was poured into the mouth, but rejected. Mr. C. then applied the bellows to her mouth, and ordered the attendant to close the nostrils, remarking, that if life could be prolonged for half an hour, he had every hope of her recovery. But in two minutes she expired, the practitioner being in the act of inflating the lungs. Death thus occurred in twelve minutes and a half from the swallowing of the draught. On a discussion which took place the next morning as to the propriety of a post-mortem examination, a practitioner in the neighbourhood opposed that proceeding on the following ground:—He stated, that having a cat which became very annoying, he determined to kill it, for which purpose he poured a teaspoonful of Scheele's prussic acid down its throat. Immediate death was, from the appearances, supposed to be the consequence, and the body was thrown into the privy, when, to his astonishment, the next day, word was brought him that the animal was alive in the kitchen. Not crediting the account, which was brought by one of his children, he went down, and beheld the cat seated opposite the fire. It immediately occurred to him, that an explanation of this extraordinary phenomenon was to be found in the supposition, that an antidote had presented itself in the gaseous atmosphere which was emitted from

the contents of the place into which he had thrown her, and that thus life had been preserved. He accordingly suggested that some such antidote should be attempted to be applied in the present instance, though in as scientific a manner as possible. Ultimately, no examination took place. The verdict at the inquest was "Manslaughter" against the assistant, who was said to have absconded.

ELECTION OF A MEDICAL CORONER FOR SHROPSHIRE.

THE spell by which attorneys and non-medical men have so long managed to retain the Coroners' chairs of England, has at length been dissolved at another point of attachment, and the office of Coroner for the county of Shropshire is no longer filled by a member of the legal profession. On Monday morning last, Mr. SAMUEL HEIGHWAY, surgeon, of Church Stretton, Salop, was formally declared by the Sheriff of the county to be duly elected as Coroner of Shropshire, after a contest of three days duration. His opponents were, Mr. M. D. HUMPHREYS (also a surgeon), of Pontesbury, and Mr. W. DOWNES, solicitor, of Ludlow. The election commenced on Thursday, the 9th instant, at Shrewsbury, and ended by the resignation of Messrs. HUMPHREYS and DOWNES on Saturday afternoon, when the poll stood as follows:—

Mr. HEIGHWAY, surgeon....755
Mr. DOWNES, lawyer.....135
Mr. HUMPHREYS, surgeon...125

Majority for the successful surgeon over the lawyer 620. The triumph was thus a very great one, not only for Mr. HEIGHWAY. but for the inhabitants of the whole county, and indeed for the entire community of England, which cannot fail eventually everywhere to profit by the gradually successful predominance of enlightened opinion on this subject over ancient and most injurious custom.

MEDICAL APPRENTICESHIPS.

To the Editor of THE LANCET.

SIR,—It is now generally admitted, that the apprenticeship system is a bad means of initiating young men into the mysteries of the healing art. Yet it is hardly to be expected that medical men, *in actual practice*, will promote its abolition, for it is a system from which *they* derive great advantage. The fees obtained and the services exacted from apprentices are large, but that the benefit is by any means *mutual* remains to be proved. We have heard much of the number of assistants out of employ and their distress. But will the number lessen, or the misery diminish while the present system continues? Medical practitioners will not go to the expense of keeping assistants while apprentices are to be had, who will both work gratuitously, and pay to be allowed to work. From these considerations, it is evident, we cannot expect much assistance from them. Yet we scarcely need their aid; for if a simple exposition of the tendency of the present injurious system were to be laid before *Parliament*, the absurd enactments on this subject would not, I think, much longer disgrace the statute book. I am, Sir, your very humble servant,

G. E. EACHUS.

Tiverton, Devon, March 30th.

ST. GEORGE'S HOSPITAL MEDICAL AND SURGICAL SOCIETY.

THIS Society met for the last time during the present session, on Thursday evening, May 9th, Dr. Seymour in the chair. The Secretary, Dr. Aldis, having read the minutes of the previous meeting, Mr. Fernandez introduced the subject of the effects of wounds received during dissection, upon which an interesting discussion arose. It was afterwards announced that the Society was adjourned to the ensuing October.

TO CORRESPONDENTS.

CLAIMS OF MEDICAL MEN ON OVERSEERS FOR PROFESSIONAL SERVICES.—*J. R.* (or P.) *W.* The remark made by us relating to the subject of inquiry was founded on the 43rd Elizabeth. The overseers, as the legal guardians of the poor, are compelled to furnish the destitute sick with proper medical attendance; if therefore a really destitute individual (observe the expression), *a truly destitute person*, cannot obtain an order from an overseer or other authorised guardian of the poor,—an order in case of accident or extreme sickness for the attendance of a medical practitioner,—still the surgeon, who, in the absence of an overseer's request, shall administer such medical relief as may be absolutely necessary, and no more, may bring his action against the officers of the parish to which the patient belongs, and must obtain a verdict if he prove his case as here stated. The law in relation to the

poor in this respect is founded upon the same principle as that which enables parties to recover from parents such expenses as may be incurred in supplying necessaries to their wives, from whom they are separated, but not legally divorced, and to their children whom they may have ejected from their houses and otherwise illtreated. In short, the legal guardian is in every instance responsible for the medical as well as the dietetic care of the individuals placed under his protection. If this were not the law of the land, what would become of the thousands of poor persons, who, in the course of a year, receive injuries, in mills and manufactories, of the most dreadful description? Is an overseer's order to be waited for until a ruptured artery has poured out the last drop of the stream of life? On the other hand, if a surgeon leave his bed at midnight, and ride, at the hazard of his life, eight or ten miles over the worst roads in England, to afford professional relief to a destitute sufferer, is he, we ask, to be denied compensation by the parochial officers, because, forsooth, his attendance was not authorised by an overseer's order? No, truly. Our laws are bad enough, both for the respectable members of the profession and the sick poor, but to this extent they are not yet abused and degraded.

THE APOTHECARIES ACT AND THE DRUGGISTS.—*Mr. W. G.* It is perfectly clear that the Apothecaries Act of 1815, confers privileges on the chemist and druggist which are entirely withheld from the members of the College of Surgeons. For example:—Surgeons are liable to the penalties of the Act if they dispense the prescriptions of legally-authorised physicians; whereas, chemists and druggists may prepare and vend, with impunity, all medicines so ordered. The question as to the right of chemists and druggists to visit, prescribe, and send medicines to patients has not yet been decided by the judges, but according to the strict letter of the Act, all these privileges are conferred on this body of retail traders. The act, indeed, declares, that not one privilege is taken from the chemist and druggist by it, whereas everybody knows that chemists and druggists, up to the 1st of August, 1815, did, in numberless instances, visit and prescribe for the sick persons at their own homes.

CANDIDATES FOR THE OFFICE OF PAROCHIAL SURGEON.—*Inquirer* of Ilfracombe. The license of the company of Apothecaries entitles the professor to practise both medicine and surgery, legally, in any part of England and Wales. The diploma of the College of Surgeons, considering how that institution has been conducted from the first moment of its incorporation, is not worth one straw. The "examinations" are so many farces, and the college, from the mercenary conduct of the council, has been, and is, in such marked disrepute, that to belong to it is rather evidence of degradation, than a characteristic either of *honour* or *professional capability*. There is no law which specifies the colleges or companies to which a medical man shall belong before he can undertake the duties of parochial surgery. In many of the workhouses and charitable institutions of London, the acting *surgeons* are licentiates of the *Apothecaries Company*. In others the acting *apothecaries* are members of the College of Surgeons.

With our next number we shall present our readers with a whole-length sketch and biographical memoir of Professor Elliotson.

(*From a Correspondent.*)—London Hospital.—Mr. Scott, on the 1st instant, awarded the surgical prize, consisting of a splendid case of surgical instruments, to Mr. Joseph Crocome, apprentice of Mr. Adams, one of the assistant surgeons, thus evincing the impartiality of a decision against his own apprentice, Mr. Russell Howard.

Inquirer of Ilfracombe. The attestation, by affidavit, of possessing the certificate of the Apothecaries Company, would be sufficient, if forwarded to the secretary of the College. (Second notice.)

W. H. B., of Birmingham. The father, although not qualified, possibly, with respect to scientific acquirements, is not disqualified with respect to legal right. The son, undoubtedly, is liable to the penalties imposed by the Apothecaries Act of 1815.

An Apprentice. Weber's Atlas and Plates, published by Schloss, will amply repay their cost by the accuracy of information which they will convey. Knox's volume on the Arteries, from Tiedemann, is, an excellent work. We hardly know what elementary B. treatise to recommend as the best, but a good knowledge of plants connected with the Materia Medica will be obtained from Churchill and Stephenson's work, with plates, last edition.

N. P.'s statements relative to the annual dinner given at the Peckham Madhouse, cannot appear unless fully authenticated. Besides, we would rather have facts than criticisms.

To the details of the law recommended by *Anti-empiricus*, we could speedily show, *viva voce*, insurmountable objections, but on paper they would occupy more space than can here be afforded to them. The necessity for change every disinterested man admits. The reform that would be effectual, may be simply expressed in these words: Let the druggist be placed under the legislative control of a competent examining body. We merely named the Apothecaries Company for that office, that the Old Ladies might have something to do which was suited to their knowledge and capacities. As for compelling every retail "chemist" to become a member of the medical body, our correspondent must himself admit that such a proposal is monstrous.

Mr. Bryant shall hear from us by post.

Inquirer.—The party holding the indenture could, if the fraud were detected, derive no advantage from its presentation at a public institution.